WELCOME

TO THE

2003 GUIDE FOR AVIATION MEDICAL EXAMINERS

This printable version of the on-line guide provides instant access to information regarding regulations, medical history, examination procedures, disposition, and protocols. Information is available in the traditional chapter format or by subject matter.

This version of the Guide retains a Chapter format.

Chapter 1 continues to provide administrative information. Chapters 2, 3, and 4 continues to provide information regarding the conduct of the examination, certification decision-making criteria, and completion instructions for the FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate.

A Glossary, AME Assisted Special Issuances, Protocols, and Appendices A – E are also provided for your review.

To navigate through the Guide by Item number or subject matter, simply click on the “BOOKMARK” tab in the left column to search specific certification decision-making criteria.

To expand any “BOOKMARK” files, click on the corresponding + button located in front of the text. Likewise, click on the + button again to collapse any of the expanded files.

LAST UPDATE: September 24, 2003

CHAPTER 1

GENERAL INFORMATION

This chapter provides input to assist an Aviation Medical Examiners (AME), otherwise known as an Examiner, in performing his or her duties in an efficient and effective manner. It also describes Examiner responsibilities as the Federal Aviation Administration's (FAA) representative in medical certification matters and as the link between airmen and the FAA.

1. Legal Responsibilities Of Designated Aviation Medical Examiners

Title 49, United States Code (U.S.C.) (Transportation), sections 109(9), 40113(a), 4701-44703, and 44709 (1994) formerly codified in the Federal Aviation Act of 1958, as amended, authorizes the FAA Administrator to delegate to qualified private persons; i.e. designated Examiners, matters related to the examination, testing, and inspection necessary to issue a certificate under the U.S.C. and to issue the certificate. Designated Examiners are delegated the Administrator's authority to examine applicants for airman medical certificates and to issue or deny issuance of certificates.

Approximately 450,000 applications for airman medical certification are received and processed each year. The vast majority of medical examinations conducted in connection with these applications are performed by physicians in private practice who have been designated to represent the FAA for this purpose. An Examiner is a designated representative of the FAA Administrator with important duties and responsibilities. It is essential that Examiners recognize the responsibility associated with their appointment.

The consequences of a negligent or wrongful certification, which would permit an unqualified person to take the controls of an aircraft, can be serious for the public, for the Government, and for the Examiner. If the examination is cursory and the Examiner fails to find a disqualifying defect that should have been discovered in the course of a thorough and careful examination, a safety hazard may be created and the Examiner may bear the responsibility for the results of such action.

Of equal concern is the situation in which an Examiner deliberately fails to report a disqualifying condition either observed in the course of the examination or otherwise known to exist. In this situation, both the applicant and the Examiner in completing the application and medical report form, may be found to have committed a violation of Federal criminal law which provides that:

> "Whoever in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or who makes any false, fictitious or fraudulent

statements or representations, or entry, may be fined up to $250,000 or imprisoned not more than 5 years, or both" (Title 18 U.S. Code. Secs. 1001; 3571).

Cases of falsification may be subject to criminal prosecution by the Department of Justice. This is true whether the false statement is made by the applicant, the Examiner, or both. In view of the pressures sometimes placed on Examiners by their regular patients to ignore a disqualifying physical defect that the physician knows to exist, it is important that all Examiners be aware of possible consequences of such conduct.

In addition, when an airman has been issued a medical certificate that should not have been issued, it is frequently necessary for the FAA to begin a legal revocation or suspension action to recover the certificate. This procedure is time consuming and costly. Furthermore, until the legal process is completed, the airman may continue to exercise the privileges of the certificate, thereby compromising aviation safety.

2. Authority of Aviation Medical Examiners

The Examiner is delegated authority to:

- Examine applicants for, and holders of, airman medical certificates to determine whether or not they meet the medical standards for the issuance of an airman medical certificate.

- Issue or deny airman medical certificates to applicants or holders of such certificates based upon whether or not they meet the applicable medical standards. The medical standards are found in Title 14 of the Code of Federal Regulations, part 67. (See Appendix A).

A medical certificate issued by an Examiner is considered to be affirmed as issued unless, within 60 days after date of issuance (date of examination), it is reversed by the Federal Air Surgeon, a RFS, or the Manager, AMCD. However, if the FAA requests additional information from the applicant within 60 days after the issuance, the above-named officials have 60 days after receipt of the additional information to reverse the issuance.

3. Equipment Requirements

For the conduct of the medical examination, Examiner's shall have adequate facilities for performing the required examinations and posess or agree to obtain the following equipment prior to conducting any FAA examinations. History or current findings may indicate a need for special evaluations.

1. Standard Snellen Test. Types for visual acuity (both near and distant) and appropriate eye lane. FAA Form 8500-1, Near Vision Acuity Test Card may be used for near and intermediate vision testing. Metal, opaque plastic or cardboard occluder.

2. Eye Muscle Test-Light. May be a spot of light 0.5cm in diameter, a regular muscle-test light, or an ophthalmoscope.

3. Maddox Rod. May be hand type.

4. Horizontal Prism Bar. Risley, Hughes, or hand prism are acceptable alternatives.

5. Color Vision Test Apparatus. Pseudoisochromatic plates, (American Optical Company (AOC), l965 edition; AOC-HRR, 2nd edition); Dvorine, 2nd edition; Ishihara, Concise 14 -, 24 -; or 38-plate editions; or Richmond (l983 edition, 15-plates). Acceptable substitutes are: Farnsworth Lantern; Keystone Orthoscope; Keystone Telebinocular; LKC Technologies, Inc., Apt-5 Color Vision Tester; OPTEC 2000 Vision Tester (Models 2000PAME, and 2000OPI); Titmus Vision Tester; Titmus II Vision Tester (Model Nos. TII and TIIS); and Titmus 2 Vision Tester (Models T2A and T2S).

6. A Wall Target consisting of a 50-inch square surface with a matte finish (may be black felt or dull finish paper) and a 2-mm white test object (may be a pin) in a suitable handle of the same color as the background.

7. Other vision test equipment that is acceptable as a replacement for 1 through 4 above includes the American Optical Company Site-Screener, Bausch and Lomb Orthorator, Keystone Orthoscope or Telebinocular, Titmus Vision Tester, or Stereo Optical Co. OPTEC 2000 VISION TESTER.

8. Standard physician diagnostic instruments and aids including those necessary to perform urinalysis.

9. Electrocardiographic equipment. Senior Examiners must have access to digital electrocardiographic equipment with electronic transmission capability.

10. Audiometric equipment. All Examiners must have access to audiometric equipment or a capability of referring applicants to other medical facilities for audiometric testing.

4. Medical Certification Decision Making and AME Assisted Special Issuance (AASI)

A. After reviewing the medical history and completing the examination, Examiners must:

- Issue a medical certificate,
- Deny the application, or
- Defer the action to the Manager, AMCD, AAM-300, or the appropriate RFS

Examiners **may issue** a medical certificate *only* if the applicant meets all medical standards, including those pertaining to medical history unless otherwise authorized by the FAA.

Examiners **may not issue** a medical certificate if the applicant fails to meet specified minimum standards or demonstrates any of the findings or diagnoses described in this Guide as "disqualifying" unless the condition is unchanged or improved and the applicant presents written documentation that the FAA has evaluated the condition, found the applicant eligible for certification, and authorized Examiners to issue certificates.

The Examiner must be aware that an established medical history or clinical diagnosis of any of the following is disqualifying:

- Angina pectoris;
- Bipolar disorder;
- Cardiac valve replacement;
- Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
- Diabetes mellitus requiring insulin or other hypoglycemic medication;
- Disturbance of consciousness without satisfactory medical explanation of the cause; and
- Epilepsy;
- Heart replacement;
- Myocardial infarction;

- Permanent cardiac pacemaker;
- Personality disorder that is severe enough to have repeatedly manifested itself by overt acts;
- Psychosis;
- Substance abuse;
- Substance dependence;
- Transient loss of control of nervous system function(s) without satisfactory medical explanation of cause.

An airman who is medically disqualified for any reason may be considered by the FAA for an Authorization for Special Issuance of a Medical Certificate (Authorization). For medical defects, which are static or nonprogressive in nature, a Statement of Demonstrated Ability (SODA), may be granted in lieu of an Authorization.

The Examiner **always may defer** the application to the FAA for action. In the interests of the applicant and of a responsive certification system, however, deferral is appropriate only if the standards are not met; if there is an unresolved question about the history, the findings, the standards, or agency policy; if the examination is incomplete; if further evaluation is necessary; or if directed by the FAA.

The Examiner **may deny** certification *only* when the applicant clearly does not meet the standards.

B. AME Assisted Special Issuance (AASI) for Third-Class Airman Medical Certification

This edition of the Guide for Aviation Medical Examiners introduces the AASI process.

The format of the Guide establishes tables in Chapter 3 for Items 25 - 48 (FAA Form 8500-8). The PROTOCOL section of the aeromedical decisions tables identifies the information required by the Agency to determine the eligibility of the applicant to be medically certificated. References to specific medical tests or procedures should be coordinated through the airman's treating physician(s). At times, an airman may not have an established treating physician and the Examiner may elect to fulfill this role. You must consider your responsibilities in your capacity as an Examiner as well as the potential conflicts that may arise when performing in this dual capacity.

If this is a first-time issuance for a disqualifying disease/condition and the airman has all of the requisite medical information necessary for a determination, the Examiner must defer and submit all of the documentation to the AMCD or contact the RFS.

For third-class applicants, the Guide refers to a number of selected medical conditions that are initially disqualifying and must be deferred to the AMCD or RFS. Following the granting of an Authorization for Special Issuance of a Medical Certificate (Authorization) by the AMCD or RFS's office, the AASI process allows the Examiner to reissue airman medical certificates provided the airman meets disease/condition certification criteria.

5. Privacy of Medical Information

A. Within the FAA, access to an individual's medical information is strictly on a "need-to-know" basis. The safeguards of the Privacy Act apply to the application for airman medical certification and to other medical files in the FAA's possession. The FAA does not release medical information without an order from a court of competent jurisdiction, written permission from the individual to whom it applies, or, with the individual's knowledge, during litigation of matters related to certification. The FAA does, however, on request, disclose the fact that an individual holds an airman medical certificate and its class, and it may provide medical information regarding a pilot involved in an accident to the National Transportation Safety Board (NTSB) (or to a physician of the appropriate medical discipline who is retained by the NTSB for use in aircraft accident investigation.)

The Examiner, as a representative of the FAA, should treat the applicant's medical certification information in accordance with the requirements of the Privacy Act. Therefore, information should not be released without the written consent of the applicant or an order from a court of competent jurisdiction. In order to ensure that release of information is proper, whenever a court order or subpoena is received by the Examiner, the appropriate RFS (see Appendix C), or the AMCD, AAM-300 (see address below), should be contacted. Similarly, unless the applicant's written consent for release is of a routine nature; e.g., accompanying a standard insurance company request, advice should be sought from the FAA before releasing any information. In all cases, copies of all released information should be retained.

B. Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Examiner’s activities for the FAA. This Act provides specific patient protections and depending upon an Examiner’s activation and practice patterns, you may have to comply with additional requirements.

Please see the *Federal Air Surgeon's Medical Bulletin • Spring 2003* for information regarding the Act. You may access this Bulletin using the following URL:

http://www.cami.jccbi.gov/AAM-400a/FASMB/FAS200301/hipaa.htm

6. Release of Information

Except in compliance with an order of a court of competent jurisdiction, or upon an applicant's written request, Examiners will not divulge or release copies of any reports prepared in connection with the examination to anyone other than the applicant or the FAA. A copy of the examination may be released to the applicant upon request. Upon receipt of a court subpoena or order, the Examiner shall notify the appropriate RFS. Other requests for information will be referred to:

MANAGER
AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26200
OKLAHOMA CITY, OK 73125-0080

7. No "Alternate" Examiners Designated

The Examiner is to conduct all medical examinations at their designated address only. An Examiner *is not permitted* to conduct examinations at a temporary address and is not permitted to name an alternate Examiner. During an Examiner's absence from the permanent office, applicants for airman medical certification shall be referred to another Examiner in the area.

8. Who May Be Certified

a. Age Requirements

There is no age restriction or aviation experience requirements for medical certification. Any applicant who qualifies medically may be issued a Medical Certificate, FAA Form 8500-9 (white), regardless of age. Examiners also have been delegated authority to issue the combined Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), which is age restricted because it is an airman medical and student pilot certificate (student license and medical certificate). For issuance of the combined certificate, the applicant must have reached his or her 16th birthday.

Minimum age requirements for the various airman certificates (i.e., pilot license certificates) are defined in 14 CFR part 61, Certification: Pilots and Flight Instructors, and Ground Inspectors as follows:

(1) Airline transport pilot (ATP) certificate: 23 years

(2) Commercial pilot certificate: 18 years

(3) Private pilot certificate: powered aircraft — 17 years; gliders and balloons — 16 years

(4) Student pilot certificate: powered aircraft — 16 years; gliders and balloons — 14 years

b. Language Requirements

An applicant for an Airman Medical and Student Pilot Certificate must be able to read, speak, write, and understand the English language.

If the Examiner believes that an applicant applying for a Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), cannot read, speak, write, and understand the English language, the applicant shall be referred to the nearest Flight Standards District Office (FSDO) for a determination of eligibility for the Student Pilot Certificate. (See Appendix E for FSDO addresses).

Under these circumstances, the Examiner may issue only a Medical Certificate, FAA Form 8500-9 (white), and the applicant must present that certificate to the FSDO when applying for a Student Pilot Certificate.

9. Classes Of Medical Certificates

An applicant may apply and be granted any class of airman medical certificate as long as the applicant meets the required medical standards for that class of medical certificate. However, an applicant must have the appropriate class of medical certificate for the flying duties the airman intends to exercise. For example, an applicant who exercises the privileges of an airline transport pilot (ATP) certificate must hold a first-class medical certificate. That same pilot when holding only a third-class medical certificate may only exercise flying activities of a private pilot certificate. Finally, an applicant need not hold an ATP airman certificate to be eligible for a first-class medical certificate.

Listed below are the three classes of airman medical certificates, identifying the categories of airmen (i.e., pilot) certificates applicable to each class.

First-Class - Airline Transport Pilot.

Second-Class - Commercial Pilot; Flight Engineer; Flight Navigator; or Air Traffic Control Tower Operator. (Note: This category of air traffic controller does not include FAA employee air traffic control specialists).

Third-Class - Private Pilot, Recreational Pilot, or Student Pilot.

Glider and Free Balloon Pilots are not required to hold a medical certificate of any class. To be issued Glider or Free Balloon Airman Certificates, the applicant must certify that he or she has no known physical defect that makes him or her unable to pilot a glider or free balloon. This certification is made at the local FAA Flight Standards District Office.

10. Validity of Medical Certificates

A. First-Class Medical Certificate: A first-class medical certificate is valid for the remainder of the month of issue; plus

6-calendar months for activities requiring a first-class medical certificate, or plus

12-calendar months for activities requiring a second-class medical certificate, or plus

24-calendar months for activities requiring a third-class medical certificate, or plus

36-calendar months for activities requiring a third-class medical certificate if the airman has not reached his or her 40th birthday on or before the date of examination.*****

B. Second-Class Medical Certificate: A second-class medical certificate is valid for the remainder of the month of issue; plus

12-calendar months for activities requiring a second-class medical certificate, or plus

24-calendar months for activities requiring a third-class medical certificate, or plus

36-calendar months for activities requiring a third-class medical certificate if the airman has not reached his or her 40th birthday on or before the date of examination.*****

C. Third-Class Medical Certificate: A third-class medical certificate is valid for the remainder of the month of issue; plus

24-calendar months for activities requiring a third-class medical certificate, or plus

36-calendar months for activities requiring a third-class medical certificate if the airman has not reached his or her 40th birthday on or before the date of examination.*****

Each medical certificate must bear the same date as the date of medical examination regardless of the date the certificate is actually issued.

***NOTE: Flight Outside the Airspace of the United States of America (U.S.A.)--a pilot who is issued a medical certificate under the age of 40 may not exercise the privileges of a private pilot certificate outside the U.S.A. after the 24 months of validity of that medical certificate except as permitted by a foreign country(s) where the flight occurs. The maximum validity of a private pilot medical certificate is 24 months under the standards of the International Civil Aviation Organization.**

11. Title 14 CFR § 61.53, Prohibition On Operations During Medical Deficiency

(a) Operations that require a medical certificate. Except as provided in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of this chapter shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:

(1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate necessary for the pilot operation; or

(2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate necessary for the pilot operation

(b) Operations that do not require a medical certificate. For operations provided for in § 61.23(b) of this part, a person shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person knows or has reason to know of any medical condition that would make the person unable to operate the aircraft in a safe manner.

12. Reexamination of an Airman

A medical certificate holder may be required to undergo a reexamination at any time if, in the opinion of the Federal Air Surgeon or authorized representative within the FAA, there is a reasonable basis to question the airman's ability to meet the medical standards. An Examiner may **NOT** order such reexamination.

13. Examination Fees

The FAA does not establish fees to be charged by Examiners for the medical examination of persons applying for airman medical certification. It is recommended that the fee be the usual and customary fee established by other physicians in the same general locality for similar services.

14. Replacement of Medical Certificates

Medical certificates that are lost or accidentally destroyed may be replaced upon proper application provided such certificates have not expired. The request should be sent to:

FOIA DESK
AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331
FEDERAL AVIATION ADMINISTRATION
CIVIL AEROSPACE MEDICAL INSTITUTE
POST OFFICE BOX 26200
OKLAHOMA CITY, OK 73125-9914

The airman's request for replacement must be accompanied by a remittance of two dollars ($2) (check or money order) made payable to the FAA. This request must include:

- The airman's full name and date of birth;
- The class of certificate;
- The place and date of examination;
- The name of the Examiner; and
- The circumstances of the loss or destruction of the original certificate.

The replacement certificate will be prepared in the same manner as the missing certificate and will bear the same date of examination regardless of when it is issued.

*In an emergency, contact your RFS or the Manager, AMCD, AAM-300, at above address or by facsimile at 405-954-4300 for certification verification **only**.*

15. Disposition of Applications and Medical Examinations

All **completed** applications and medical examinations, unless otherwise directed by the FAA, **must** be transmitted electronically within 14 days after completion to the AMCD.

In addition, the FAA/Original Copy **must** be mailed to:

MANAGER
AEROSPACE MEDICALCERTIFICATION DIVISION, AAM-300
CIVIL AEROSPACE MEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73125-0080

These may be batch mailed at monthly intervals. All **incomplete** applications and medical examinations **must** be mailed immediately to the above address.

The AME Work Copy **must** be retained by the AME as their file copy for at least 3 years unless exceeded by state law requirements where the AME is licensed and performed the examination.

The Applicant's Copy of the FAA Form 8500-8 (last page) must be given to the applicant along with the information for Applicant and the instruction sheet.

Examiners not required to use the AMCS; e.g., International AME's, **mus**t forward the typed, completed FAA/Original Copy to the above address.

16. Protection and Destruction of Forms

Examiners are cautioned to provide adequate security for blank medical application and certificate forms to ensure that they do not become available for illegal use. When the FAA issues new or revised medical forms and certificates, the FAA will advise Examiners of the disposition of the old forms and certificates. The serial numbers of FAA Form 8500-8 assigned to each Examiner are recorded at the Civil Aerospace Medical Institute in Oklahoma City. If asked, the Examiner should be prepared to account for the forms. The Examiners are responsible making provisions to return of all unused FAA forms at such time they leave (resign, retire, terminated, or death) the AME Program. **Forms should not be shared with other Examiners.**

17. Questions or Requests for Assistance

When an Examiner has a question or needs assistance in carrying out responsibilities, the Examiner should contact one of the following individuals:

***a. Regional Flight Surgeon (RFS) (*Names, addresses, and telephone numbers of RFS's are provided in Appendix C).**

- Questions pertaining to problem medical certification cases in which the RFS has initiated action.

- Telephone interpretation of medical standards or policies involving an individual airman whom the Examiner is examining.

- Matters regarding designation and redesignation of Examiners and the Aviation Medical Examiner Program.

- Attendance at Aviation Medical Examiner Seminars.

b. Manager, AMCD, AAM-300

- Inquiries concerning guidance on problem medical certification cases.

- Information concerning the overall airman medical certification program.

- Matters involving FAA medical certification of military personnel.

- Information concerning medical certification of applicants in foreign countries.

These inquiries should be made to:

MANAGER
AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-300
CIVIL AEROSPACE MEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73125

c. Manager, Aeromedical Education Division, AAM-400

- Matters regarding designation and redesignation of International Examiners, military facilities, and military Examiners.

- Requests for medical forms and stationery.

- Requests for airman medical educational material.

These inquiries should be made to:

MANAGER
AEROSPACE MEDICAL EDUCATION DIVISION, AAM-400
CIVIL AEROSPACE MEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 25082
OKLAHOMA CITY, OK 73125-0082

18. Airman Appeals

a. Request for Reconsideration

An Examiner's denial of a medical certificate is not a final FAA denial. An applicant may ask for reconsideration of an Examiner's denial by submitting a request in writing to:

FEDERAL AIR SURGEON
ATTN: MANAGER,
AEROSPACE MEDICAL CERTIFICATION DIVISION, AAM-331
CIVIL AEROSPACE MEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26200
OKLAHOMA CITY, OK 73125-0080

The AMCD will provide initial reconsideration. Some cases may be referred to the appropriate RFS for action. If the AMCD, or a RFS finds that the applicant is not qualified, the applicant is denied and advised of further reconsideration and appeal procedures. These may include reconsideration by the Federal Air Surgeon and/or petition for NTSB review.

b. Authorization for Special Issuance of a Medical Certificate (Authorization)

At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, may be granted to a person who does not meet the established medical standards if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who fails to meet one or more of the established medical standards if that person possesses a valid agency issued Authorization and is otherwise eligible. An airman medical certificate issued in accordance with the special issuance section of part 67 (14 CFR § 67.401), shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. An airman must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety in order to obtain a new medical certificate and/or a Re-Authorization.

In granting an Authorization, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The factors leading to and surrounding the episode
- The combined effect on the person of failing to meet one or more than one requirement of part 67; and
- The prognosis derived from professional consideration of all available information regarding the person.

In granting an Authorization, the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:

- Limit the duration of an Authorization;
- Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;
- State on the Authorization, and any medical certificate based upon it, any operational limitation needed for safety; or
- Condition the continued effect of an Authorization, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.
- In determining whether an Authorization should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

An Authorization granted to a person who does not meet the applicable medical standards of part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;

- The holder fails to comply with a statement of functional limitations or operational limitations issued as a condition of certification under the special issuance section of part 67 (14 CFR 67.401);

- Public safety would be endangered by the holder's exercise of airman privileges;

- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the special issuance section of part 67 (14 CFR 67.401); or

- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization under the falsification section of part 67 (14 CFR 67.403).

A person who has been granted an Authorization under the special issuance section of part 67 (14 CFR 67.401), based on a special medical flight or practical test, need not take the test again during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

The authority of the Federal Air Surgeon under the special issuance section of part 67 (14 CFR 67.401) is also exercised by the Manager, AMCD, and each RFS.

If an Authorization is withdrawn at any time, the following procedures apply:

- The holder of the Authorization will be served a letter of withdrawal, stating the reason for the action;

- By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

- A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of part 67 (14 CFR 67.401) shall be surrendered to the Administrator upon request.

c. Statement of Demonstrated Ability (SODA)

At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA) may be granted, instead of an Authorization, to a person whose disqualifying condition is static or nonprogressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and

authorizes a designated Examiner to issue a medical certificate of a specified class if the Examiner finds that the condition described on the SODA has not adversely changed.

In granting a SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The combined effect on the person of failure to meet more than one requirement of part 67; and

- The prognosis derived from professional consideration of all available information regarding the person.

In granting a SODA under the special issuance section of part 67 (14 CFR 67.401), the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any of the following:

- State on the SODA, and on any medical certificate based upon it, any operational limitation needed for safety; or

- Condition the continued effect of a SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.

- In determining whether a SODA should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

A SODA granted to a person who does not meet the applicable standards of part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;

- The holder fails to comply with a statement of functional limitations or operational limitations issued under the special issuance section of part 67 (14 CFR 67.401).

- Public safety would be endangered by the holder's exercise of airman privileges;

- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the special issuance section of part 67 (14 CFR 67.401).

- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of a SODA under the falsification section of part 67 (14 CFR 67.403); or

- A person who has been granted a SODA under the special issuance section of part 67 (14 CFR 67.401), based on a special medical flight or practical test need not take the test again during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

The authority of the Federal Air Surgeon under the special issuance section of part 67 (14 CFR 67.401) is also exercised by the Manager, AMCD, and each RFS.

If a SODA is withdrawn at any time, the following procedures apply:

- The holder of the SODA will be served a letter of withdrawal stating the reason for the action;

- By not later than 60 days after the service of the letter of withdrawal, the holder of the SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

- A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of part 67 (14 CFR 67.401(a)) shall be surrendered to the Administrator upon request.

d. National Transportation Safety Board (NTSB)

Within 60 days after a final FAA denial of an unrestricted airman medical certificate, an airman may petition the NTSB for a review of that denial. The NTSB does not have jurisdiction to review the denial of a SODA or special issuance airman medical certificate. A petition for NTSB review must be submitted in writing to:

NATIONAL TRANSPORTATION SAFETY BOARD
490 L'ENFANT PLAZA, EAST SW
WASHINGTON, DC 20594-0001

The NTSB is an independent agency of the Federal Government that has the authority to review on appeal the suspension, amendment, modification, revocation, or denial of any certificate or license issued by the FAA Administrator.

An Administrative Law Judge for the NTSB may hold a formal hearing at which the FAA will present documentary evidence and testimony by medical specialists supporting the denial decision. The petitioner will also be given an opportunity to present evidence and testimony at the hearing. The Administrative Law Judge's decision is subject to review by the full NTSB.

CHAPTER 2

APPLICATION FOR MEDICAL CERTIFICATION

General Information

This section contains guidance for items on the Medical History and General Information page of FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate.

I. AME Guidance for Positive Identification of Airmen and Application Distribution Procedures

All applicants must be asked to show proof of age and identity. On occasion, individuals have attempted to be examined under a false name. If the applicant is unknown to the Examiner, the Examiner should request evidence of positive identification. A Government issued photo identification (e.g., driver's license, identification card issued by a driver's license authority, military identification, or passport) provides age and identity and is preferred. Applicants may use other government-issued identification for age (e.g., certified copy of a birth certificate); however, the Examiner must request separate photo identification for identity (such as a work badge). Verify that the address provided is the same as that given under Item 5. Record the type of identification(s) provided and identifying number(s) under Item 61. Make a copy of the identification and keep it on file for 3 years with the AME work copy.

An applicant who does not have government-issued photo identification may use non-photo government-issued identification (e.g. pilot certificate, birth certificate, voter registration card) in conjunction with a photo identification (e.g. work identification card, student identification card).

If an airman fails to provide identification, the Examiner must report this immediately to the AMCD, or the appropriate RFS for guidance.

II. Distribution of the FAA Form 8500-8 to the Applicant.

Both the yellow and white certificates and their instructions **must** be removed before the application is given to the applicant. The Information for Applicant and Instructions for Completion of the Application pages **must** also be given to the applicant.

On the general information and medical history page of the application, the applicant is to fill in Items 1-20 in his or her handwriting using a ballpoint pen, exerting sufficient pressure for all copies, to make legible imprints upon the Examiner's and airman's copies of the form.

III. After the Applicant Completes the Medical History Page of the FAA Form 8500-8:

The Examiner must ensure completeness and review all items 1 through 20. A medical certificate must never be issued to an applicant who refuses to answer Item 13, page 25; Items 16 and 17, page 26; Item 18, page 28; or Item 19, page 33; or to an applicant who refuses to sign the form (Item 20, front side of the examination form). The date for Item 16 may be estimated if the applicant does not recall the actual date of the last examination. However, for the sake of electronic transmission, it must be placed in the mm/dd/yyyy format. (See Item 16, page 26).

Verify that the name on the applicant's identification media matches the name on the 8500-8. If it does not, question the applicant for an explanation. If the explanation is not reasonable (legal name change, subsequent marriage, etc.), do not continue the medical examination or issue a medical certificate. Contact your RFS for guidance.

The applicant's Social Security Number (SSN) is not mandatory. Failure to provide is not grounds for refusal to issue a medical certificate. (See Item 4, page 4). All other items on the form must be completed.

Applicants must provide their home address on the 8500-8. Applicants may use a private mailing address (e.g., a P.O. Box number or a mail drop) if that is their preferred mailing address; however, under Item 18 (in the "Explanations" box) of the 8500-8, they must provide their home address.

The applicant must personally enter all data and make all corrections on the application form. The applicant should initial all corrections. The application constitutes a legal document and *must be completed in the applicant's handwriting.* If for any reason someone other than the applicant enters information in Items 1-20, the person should initial beside that item (including any check marks), and the Examiner should add a note explaining in Item 60 (see, page 149), the person's inability to enter the data.

Strict compliance with this procedure is essential in case it becomes necessary for the FAA to take legal action for falsification of the application.

ITEMS 1-2. APPLICATION FOR; CLASS OF MEDICAL CERTIFICATE APPLIED FOR

1. Application For:		2. Class of Medical Certificate Applied For:					
Airman Medical Certificate	Airman Medical and Student Pilot Certificate	☐	1ST	☐	2nd	☐	3rd

The applicant indicates whether the application is for an Airman Medical Certificate (white) or an Airman Medical and Student Pilot Certificate (yellow), and the class of medical certificate desired.

The class of medical certificate sought by the applicant is needed so that the appropriate medical standards may be applied. The class of certificate issued must correspond with that for which the applicant has applied.

The applicant may ask for a medical certificate of a higher class than needed for the type of flying or duties currently performed. For example, a student pilot may ask for a first-class medical certificate to see if he or she qualifies medically before entry into an aviation career.

The Examiner applies the standards appropriate to the class sought, not to the airman's duties - either performed or anticipated. The Examiner should never issue more than one certificate based on the same examination.

ITEMS 3-10. IDENTIFICATION

3. Last Name		**First Name**	Middle Name
4. Social Security Number			- -
5. Address		Telephone Number ( )	
Number/Street			
City	State/Country		Zip Code
6. Date of Birth	7. Color of Hair	8. Color of Eyes	9. Sex
MM / DD / YYYY			
Citizenship			
10. Type of Airman Certificate(s) you hold			
☐ None	☐ ATC Specialist	☐ Flight Instructor	☐ Recreational
☐ Airline Transport	☐ Flight Engineer	☐ Private	☐ Other
☐ Commercial	☐ Fight Navigator	☐ Student	

The following information is required for identification of the individual who is applying for medical certification:

3. Last Name; First Name; Middle Name

The applicant's last, first, and middle name (or initial if appropriate) **must** be printed. All applicants without a middle name should enter "NMN" or "NONE". Nicknames and abbreviated names **must** not be used. **NOTE**: If the applicant's name changed for any reason, the current name is listed on the application and any former name(s) in the EXPLANATIONS box of Item 18 on the application.

4. Social Security Number (SSN)

Although applicants are asked to complete all questions on the application, FAA Form 8500-8, they are not legally required to complete Item 4. The FAA requests the SSN for identification purposes and record control. Its use as a unique identifier may eliminate a mistake in identification.

5. Address and Telephone Number

The applicant must print a permanent mailing address, including country, and the zip code (full nine digits if known). The person must also provide a current daytime area code and telephone number.

6. Date of Birth

The applicant **must** enter the numbers for the month, day, and year of birth in order (e.g., 04/29/2000 for April 29, 2000). Name, date of birth, and SSN are the basic identifiers of airmen. When an Examiner wishes to communicate with the FAA concerning an applicant, the Examiner **must** give the applicant's full name, date of birth, and SSN if at all possible. The applicant should indicate citizenship; e.g., U.S.A.

If the applicant wishes to be issued an Airman Medical and Student Pilot Certificate (FAA Form 8420-2), the Examiner should check the date of birth to ensure that the applicant is at least 16 years old. Unless the applicant is at least 16 years old, a combined Airman Medical and Student Pilot Certificate *may not be issued,* even if the applicant will become 16 before the certificate expires (except as noted below).

The FAA will **not confirm** a certificate issued by an Examiner to a person who is less than 16 years old. The applicant must be at least 16 **at the time of application** to be eligible for a student pilot certificate for flight of powered aircraft. This minimum age requirement applies only to the issuance of the yellow FAA Form 8420-2, and never to the issuance of the white medical certificate (FAA Form 8500-9).

If the applicant is not yet 16 and wishes to solo on or after his or her 16th birthday, the Examiner should issue a white FAA Form 8500-9 (if the applicant is fully qualified medically). On or after his or her 16th birthday, the applicant may obtain a student pilot certificate for the flight from a FAA Flight Standards District Office (FSDO) or designated Flight Examiner upon presentation of the FAA Form 8500-9 (white medical certificate).

An alternative procedure for this situation is for the Examiner to issue the Airman Medical and Student Pilot Certificate, FAA Form 8420-2 (yellow), with the following statement in the limitations block of the student pilot certificate:

NOT VALID UNTIL (MONTH, DAY, AND YEAR OF 16TH BIRTHDAY)

This procedure should not be used if the applicant's 16th birthday will occur more than 30 days from the date of application.

Although nonmedical regulations allow an airman to solo a glider or balloon at age 14, a medical certificate is not required for glider or balloon operations. These airmen are required to certify to the FAA that they have no known physical defects that make them unable to pilot a glider or balloon. This certification is made at the FAA FSDO's.

There is a maximum age requirement for certain air carrier pilots. Because this is not a medical requirement but an operational one, the Examiner may issue medical certificates without regard to age to any applicant who meets the medical standards.

7. Color of Hair

Color of hair should be entered as "brown," "black," "blonde," "gray," or "red." Lack of hair should be entered as "bald." No abbreviations or other colors should be used. This information is for identification only.

8. Color of Eyes

Color of eyes should be entered as "brown," "black," "blue," "hazel," "gray," or "green." No abbreviations or other colors should be used. This information is for identification only.

9. Sex

The applicant should enter either male or female.

10. Type of Airman Certificate(s) You Hold

Applicant checks appropriate block(s).

ITEMS 11-12. OCCUPATION; EMPLOYER

11. Occupation	12. Employer

Occupational data are principally used for statistical purposes. This information, along with information obtained from Items 10, 14, and 15, may be important in determining whether a SODA may be issued, if applicable.

11. Occupation

This should reflect the applicant's major employment. "Pilot" should only be reported when the applicant earns a livelihood from flying.

12. Employer

The employer's name should be entered by the applicant.

ITEM 13. HAS YOUR FAA AIRMAN MEDICAL CERTIFICATE EVER BEEN DENIED, SUSPENDED, OR REVOKED?

13. Has Your FAA Airman Certificate Ever Been Denied, Suspended, or Revoked?		
☐ **Yes**	☐ **No**	**If yes, give date** _____ **MM / DD / YYYY**

The applicant shall check "yes" or "no." If "yes" is checked, the applicant should enter the date of action and should report details in the EXPLANATIONS box of Item 18.

The Examiner may not issue a medical certificate to an applicant who has checked "yes." The only exceptions to this prohibition are:

- The applicant presents written evidence from the FAA that he or she was subsequently medically certificated and that an Examiner is authorized to issue a renewal medical certificate to the person if medically qualified; or

- The Examiner obtains oral or written authorization to issue a medical certificate from an FAA medical office.

ITEMS 14-15. TOTAL PILOT TIME

Total Pilot Time (Civilian Only) **14. To Date**	**15. Past 6 months**

14. Total Pilot Time to Date

The applicant should indicate the total number of *civilian* flight hours and whether those hours are logged (LOG) or estimated (EST).

15. Total Pilot Time Past 6 Months

The applicant should provide the number of *civilian* flight hours in the 6-month period immediately preceding the date of this application. The applicant should indicate whether those hours are logged (LOG) or estimated (EST).

ITEM 16. DATE OF LAST FAA MEDICAL APPLICATION

Date of Last FAA Medical Application	☐
MM/DD/YYY	No Prior Application

If a prior application was made, the applicant should indicate the date of the last application, even if it is only an estimate of the year. This item should be completed even if the application was made many years ago or the previous application *did not result in the issuance* of a medical certificate. If no prior application was made, the applicant should check the appropriate block in Item 16.

ITEM 17.a. DO YOU CURRENTLY USE ANY MEDICATION (PRESCRIPTION OR NONPRESCRIPTION)?

17.a. Do You Currently Use Any Medication (Prescription or Nonprescription)?		
☐ No ☐ Yes	(If yes, list below medication(s) used and check appropriate box).	Previously Reported
		Yes ☐ / No ☐
		Yes ☐ / No ☐
		Yes ☐ / No ☐
		Yes ☐ / No ☐
(If more space is required, see 17.a. on the instruction sheet).		

If the applicant checks yes, give name of medication(s) and indicate if the medication was listed in a previous FAA medical examination.

This includes both prescription and nonprescription medication. (Additional guidelines for the certification of airmen who use medication may be found in Chapter 4).

For example, any airman who is undergoing continuous treatment with anticoagulants, antiviral agents, anxiolytics, barbiturates, chemotherapeutic agents, experimental hypoglycemic, investigational, mood-ameliorating, motion sickness, narcotic, sedating antihistaminic, sedative, steroid drugs, or tranquilizers must be deferred certification

unless the treatment has previously been cleared by FAA medical authority. In such an instance, the applicant should provide the Examiner with a copy of any FAA correspondence that supports the clearance.

During periods in which the foregoing medications are being used for treatment of acute illnesses, the airman is under obligation to refrain from exercising the privileges of his/her airman medical certificate unless cleared by the FAA.

Further information concerning an applicant's use of medication may be found under the items pertaining to specific medical condition(s) for which the medication is used, or you may contact your RFS.

ITEM 17.b. DO YOU EVER USE NEAR VISION CONTACT LENS(ES) WHILE FLYING?

17.b. Do You Ever Use Near Vision Contact Lens(es) While Flying?	☐	**Yes**	☐	**No**

The applicant should indicate whether near vision contact lens(es) is/are used while flying. If the applicant answers "yes," the Examiner should counsel the applicant that the use of contact lens(es) (bifocal or unifocal) specifically for the correction of near vision is/are inappropriate. The Examiner must note in Item 60 that this counseling has been given.

If the applicant checks "yes" and no further comment is noted on FAA Form 8500-8 by either the applicant or the Examiner, a letter will automatically be sent to the applicant informing him or her that the use of contact lens(es) specifically to correct near vision is/are inappropriate for flying.

ITEM 18. MEDICAL HISTORY

18. Medical History - HAVE YOU EVER IN YOUR LIFE BEEN DIAGNOSED WITH, HAD, OR DO YOU PRESENTLY HAVE ANY OF THE FOLLOWING? Answer "yes" or "no" for every condition listed below. In the EXPLANATIONS box below, you may note 'PREVIOUSLY REPORTED, NO CHANGE" only if the explanation of the condition was reported on a previous application for an airman medical certificate and there has been no change in your condition. **See Instructions Page**

Yes	No	Condition	Yes	No	Condition	Yes	No	Condition	Yes	No	Condition
a. ☐	☐	Frequent or severe headaches	g. ☐	☐	Heart or vascular trouble	m. ☐	☐	Mental disorders of any sort; depression, anxiety, etc.	r. ☐	☐	Military medical discharge
b. ☐	☐	Dizziness or fainting spell	h. ☐	☐	High or low blood pressure	n. ☐	☐	Substance dependence or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years	s. ☐	☐	Medical rejection by military service
c. ☐	☐	Unconsciousness for any reason	i. ☐	☐	Stomach, liver, or intestinal trouble				t. ☐	☐	Rejection for life or health insurance
d. ☐	☐	Eye or vision trouble except glasses	j. ☐	☐	Kidney stone or blood in urine	o. ☐	☐	Alcohol dependence or abuse	u. ☐	☐	Admission to hospital
e. ☐	☐	Hay fever or allergy	k. ☐	☐	Diabetes	p. ☐	☐	Suicide attempt	x. ☐	☐	Other illness, disability, or surgery
f. ☐	☐	Asthma or lung disease	l. ☐	☐	Neurological disorders; epilepsy, seizures, stroke, paralysis,. etc.	q. ☐	☐	Motion sickness requiring medication			

Conviction and/or Administrative Action History - See Instructions Page

Yes	No		Yes	No	
v. ☐	☐	History of (1) any conviction(s) involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug; or (2) history of any conviction(s) or administrative action(s) involving an offense(s) which resulted in the denial, suspension, cancellation, or revocation of driving privileges or which resulted in attendance at an educational or a rehabilitation program.	w. ☐	☐	History of nontraffic conviction(s)(misdemeanors or felonies).

EXPLANATIONS: See Instructions Page

For FAA Use
Review Action Codes

Each item under this heading must be checked either "yes" or "no." For all items checked "yes," a description and approximate date of every condition the applicant has ever been diagnosed with, had, or presently has, must be given in the EXPLANATIONS box. If information has been reported on a previous application for airman medical certification and there has been no change in the condition, the applicant may note "PREVIOUSLY REPORTED, NO CHANGE" in the EXPLANATIONS box, but the applicant must still check "yes" to the condition.

Of particular importance are conditions that have developed since the last FAA medical examination. If more space is needed, a plain sheet of paper bearing the applicant's full printed name, date of birth, signature, and the date should be used.

The Examiner must take the time to review the applicant's responses on FAA Form 8500-8 before starting the applicant's medical examination.

The Examiner should ensure that the applicant has checked all of the boxes in Item 18 as either "yes" or "no." The Examiner should use information obtained from this review in asking the applicant pertinent questions during the course of the examination. Certain aspects of the individual's history may need to be elaborated upon. The Examiner should provide in Item 60 an explanation of the nature of items checked "yes" in Items 18.a. through 18.x. An additional sheet may be added if necessary.

Supplementary reports from the applicant's physician(s) should be obtained and forwarded to the AMCD, when necessary, to clarify the significance of an item of history.

The responsibility for providing such supplementary reports rests with the applicant. A discussion with the Examiner's RFS may clarify and expedite the certification process at that time.

Affirmative answers alone in Item 18 do not constitute a basis for denial of a medical certificate. A decision concerning issuance or denial should be made by applying the medical standards pertinent to the conditions uncovered by the history.

Experience has shown that, when asked direct questions by a physician, applicants are likely to be candid and willing to discuss medical problems.

The Examiner should attempt to establish rapport with the applicant and to develop a complete medical history. Further, the Examiner should be familiar with the FAA certification policies and procedures in order to provide the applicant with sound advice.

18.a. Frequent or severe headaches. The applicant should report frequency, duration, characteristics, severity of symptoms, neurologic manifestations, and whether they have been incapacitating, treatment and side effects, if any. (See Item 46, page 100).

18.b. Dizziness or fainting spells. The applicant should describe characteristics of the episode; e.g., spinning or lightheadedness, frequency, factors leading up to and surrounding the episode, associated neurologic symptoms; e.g., headache, nausea, LOC, or paresthesias. Include diagnostic workup and treatment if any. (See Items 25-30, page 38; and Item 46, page 100).

18.c. Unconsciousness for any reason. The applicant should describe the event(s) to determine the primary organ system responsible for the episode, witness statements, initial treatment, and evidence of recurrence or prior episode. Although the regulation states, “an unexplained disturbance of consciousness is disqualifying,” it does not mean to imply that the applicant can be certificated if the etiology is identified, because the etiology may also be disqualifying in and of itself. (See Item 46, page 100).

18.d. Eye or vision trouble except glasses. The Examiner should personally explore the applicant's history by asking questions, concerning any changes in vision, unusual visual experiences (halos, scintillations, etc.), sensitivity to light, injuries, surgery, or current use of medication. Does the applicant report inordinate difficulties with eye fatigue or strain? Is there a history of serious eye disease such as glaucoma or other disease commonly associated with secondary eye changes, such as diabetes? For glaucoma or ocular hypertension, obtain a FAA Form 8500-14, Report of Eye Evaluation for Glaucoma. For any other medical condition, obtain a FAA Form 8500-7, Report of Eye Evaluation. Under all circumstances, please advise the examining eye specialist to explain why the airman is unable to correct to Snellen visual acuity of 20/20. (Also see Items 31-34, page 45; Item 53, page 139; and Item 54, page 141).

18.e. Hay fever or allergy. The applicant should report frequency and duration of symptoms, and whether they have been incapacitating by the condition. Mention

should also be made of treatment and side effects. The Examiner should inquire whether the applicant has ever experienced any “ear block”, barotitis, or any other symptoms that could interfere with aviation safety? Barosinusitis is of concern and should also be ruled out. (See Item 26, page 41).

18.f. Asthma or lung disease. The applicant should provide frequency and severity of asthma attacks, medications, and number of visits to the hospital and/or emergency room. For other lung conditions, a detailed description of symptoms/diagnosis, surgical intervention, and medications should be provided. (See Item 35, page 54).

18.g. Heart or vascular trouble. The applicant should describe the condition to include, dates, symptoms, and treatment, and provide medical reports to assist in the certification decision-making process. These reports should include: operative reports of coronary intervention to include the original cardiac catheterization report, stress tests, worksheets, and original tracings (or a legible copy). When stress tests are provided, forward the reports, worksheets and original tracings (or a legible copy) to the FAA. Part 67 provides that, for all classes of medical certificates, an established medical history or clinical diagnosis of myocardial infarction, angina pectoris, cardiac valve replacement, permanent cardiac pacemaker implantation, heart replacement, or coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant, is cause for denial. (See Item 36. page 61)

18.h. High or low blood pressure. The applicant should provide history and treatment. Issuance of a medical certificate to an applicant with high blood pressure may depend on the current blood pressure levels and whether the applicant is taking anti-hypertensive medication. The Examiner should also determine if the applicant has a history of complications, adverse reactions to therapy, hospitalization, etc. (Details are given in Items 36, page 61; and Item 55, page 143).

18.i. Stomach, liver, or intestinal trouble. The applicant should provide history and treatment, pertinent medical records, current status report, and medication. If a surgical procedure was done, the applicant must provide operative and pathology reports. (See Item 38, page 74).

18.j. Kidney stone or blood in urine. The applicant should provide history and treatment, pertinent medical records, current status report and medication. If a procedure was done, the applicant must provide the report and pathology reports. (See Item 41, page 83).

18.k. Diabetes. The applicant should describe the condition to include, symptoms and treatment. Comment on the presence or absence of hyperglycemic and/or hypoglycemic episodes. A medical history or clinical diagnosis of diabetes mellitus requiring insulin or other hypoglycemic drugs for control are disqualifying. The Examiner can help expedite the FAA review by assisting the applicant in gathering medical records and submitting a current specialty report. (See Item 48, page 120).

18.l. Neurological disorders; epilepsy, seizures, stroke, paralysis, etc. The applicant should provide history and treatment, pertinent medical records, current status report and medication. The Examiner should obtain details about such a history and report the results. An established diagnosis of epilepsy, a transient loss of control of nervous system function(s), or a disturbance of consciousness is a basis for denial no matter how remote the history. Like all other conditions of aeromedical concern, the history surrounding the event is crucial. Certification is possible if a satisfactory explanation can be established. (See Item 46, page 100).

18.m. Mental disorders of any sort; depression, anxiety, etc. An affirmative answer to Item 18.m. requires investigation through supplemental history taking. Dispositions will vary according to the details obtained. An applicant with an established history of a personality disorder that is severe enough to have repeatedly manifested itself by overt acts, a psychosis disorder, or a bipolar disorder must be denied or deferred by the Examiner. (See Items 46, page 100; and Item 47, page 112).

18.n. Substance dependence; or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years. "Substance" includes alcohol and other drugs (e.g., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). For a "yes" answer to Item 18.n., the Examiner should obtain a detailed description of the history. A history of substance dependence or abuse is disqualifying. The Examiner must defer issuance of a certificate if there is doubt concerning an applicant's substance use. (See Item 47, page 112).

18.o. Alcohol dependence or abuse. See Item 18.n.

18.p. Suicide attempt. A history of suicidal attempts or suicidal gestures requires further evaluation. The ultimate decision of whether an applicant with such a history is eligible for medical certification rests with the FAA. The Examiner should take a supplemental history as indicated, assist in the gathering of medical records related to the incident(s), and, if the applicant agrees, assist in obtaining psychiatric and/or psychological examinations. (See Item 47, page 112).

18.q. Motion sickness requiring medication. A careful history concerning the nature of the sickness, frequency and need for medication is indicated when the applicant responds affirmatively to this item. Because motion sickness varies with the nature of the stimulus, it is most helpful to know if the problem has occurred in flight or under similar circumstances. (See Item 29, page 43).

18.r. Military medical discharge. If the person has received a military medical discharge, the Examiner should take additional history and record it in Item 60. It is helpful to know the circumstances surrounding the discharge, including dates, and whether the individual is receiving disability compensation. If the applicant is receiving veteran's disability benefits, the claim number and service number are helpful in obtaining copies of pertinent medical records. The fact that the applicant is receiving disability benefits does not necessarily mean that the application should be denied.

18.s. Medical rejection by military service. The Examiner should inquire about the place, cause, and date of rejection and enter the information in Item 60. It is of great assistance to the applicant and the FAA if the Examiner can help obtain copies of military documents for attachment to the FAA Form 8500-8. If a delay of more than 14-calendar days is expected, the Examiner should transmit FAA Form 8500-8 to the FAA with a note specifying what documents will be forwarded later under separate cover.

Disposition will depend upon whether the medical condition still exists or whether a history of such a condition requires denial or deferral under the FAA medical standards.

18.t. Rejection for life or health insurance. The Examiner should inquire regarding the circumstances of rejection. The supplemental history should be recorded in Item 60. Disposition will depend upon whether the medical condition still exists or whether a history of such a condition requires denial or deferral under the FAA medical standards.

18.u. Admission to hospital. For each admission, the applicant should list the dates, diagnoses, duration, treatment, name of the attending physician, and complete address of the hospital or clinic. If previously reported, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE." A history of hospitalization does not disqualify an applicant, although the medical condition that resulted in hospitalization may.

18.v. Conviction and/or Administrative Action History. The events to be reported are specifically identified in Item 18.v. of FAA Form 8500-8. If "yes" is checked, the applicant must describe the conviction(s) and/or administrative action(s) in the EXPLANATIONS box. The description must include:

- The alcohol or drug offense for which the applicant was convicted or the type of administrative action involved (e.g., attendance at an educational or rehabilitation program in lieu of conviction; license denial, suspension, cancellation, or revocation for refusal to be tested; educational safe driving program for multiple speeding convictions; etc.);

- The name of the state or other jurisdiction involved; and

- The date of the conviction and/or administrative action.

If there have been no new convictions or administrative actions since the last application, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE." Convictions and/or administrative actions affecting driving privileges may raise questions about the applicant's fitness for certification and may be cause for disqualification. (See Items 18.n. and 47, page 112).

A single driving while intoxicated (DWI) conviction or administrative action usually is not cause for denial if there are no other instances or indications of substance dependence

or abuse. The Examiner should inquire regarding the applicant's alcohol use history, the circumstances surrounding the incident, and document those findings in Item 60, page 149. (See Item 47, page 112).

NOTE: The Examiner should advise the applicant that the reporting of alcohol or drug offenses (i.e., motor vehicle violation) on the history part of the medical application does not relieve the airman of responsibility to report each motor vehicle action to the FAA within 60 days of the occurrence to the Civil Aviation Security Division, AAC-700; P.O. Box 25810; Oklahoma City, OK 73125-0810.

18.w. History of nontraffic convictions. The applicant must report any other (nontraffic) convictions (e.g., assault, battery, public intoxication, robbery, etc.). The applicant must name the charge for which convicted and the date of the conviction(s), and copies of court documents (if available). (See Item 47, page 112).

18.x. Other illness, disability, or surgery. The applicant should describe the nature of these illnesses in the EXPLANATIONS box. If additional records, tests, or specialty reports are necessary in order to make a certification decision, the applicant should so be advised. If the applicant does not wish to provide the information requested by the Examiner, the Examiner should defer issuance.

If the applicant wishes to have the FAA review the application and decide what ancillary documentation is needed, the Examiner should defer issuance of the medical certificate and forward the completed FAA Form 8500-8 to the AMCD. If the Examiner proceeds to obtain documentation, but all data will not be received with the 2 weeks, FAA Form 8500-8 should be transmitted immediately to the AMCD with a note that additional documents will be forwarded later under separate cover.

ITEM 19. VISITS TO HEALTH PROFESSIONAL WITHIN LAST 3 YEARS

19. Visits to Health Professional Within Last 3 Years	☐ Yes (Explain Below)	☐ NO	See Instructions Page
Date	**Name, Address, and Type of Health Professional Consulted**		**Reason**

The applicant should list all visits in the last 3 years to a physician, physician assistant, nurse practitioner, psychologist, clinical social worker, or substance abuse specialist for treatment, examination, or medical/mental evaluation. The applicant should list visits for counseling only if related to a personal substance abuse or psychiatric condition. The applicant should give the name, date, address, and type of health professional

consulted and briefly state the reason for the consultation. Multiple visits to one health professional for the same condition may be aggregated on one line.

Routine dental, eye, and FAA periodic medical examinations and consultations with an employer-sponsored employee assistance program (EAP) may be excluded unless the consultations were for the applicant's substance abuse or unless the consultations resulted in referral for psychiatric evaluation or treatment.

When an applicant does provide history in Item 19, the Examiner should review the matter with the applicant. The Examiner will record in Item 60 only that information needed to document the review and provide the basis for a certification decision. If the Examiner finds the information to be of a personal or sensitive nature with no relevancy to flying safety, it should be recorded in Item 60 as follows:

> "Item 19. Reviewed with applicant. History not significant or relevant to application."

If the applicant is otherwise qualified, a medical certificate may be issued by the Examiner.

FAA medical authorities, upon review of the application, will ask for further information regarding visits to health care providers only where the physical findings, report of examination, applicant disclosure, or other evidence suggests the possible presence of a disqualifying medical history or condition.

If an explanation has been given on a previous report(s) and there has been no change in the condition, the applicant may enter "PREVIOUSLY REPORTED, NO CHANGE."

Of particular importance is the reporting of conditions that have developed since the applicant's last FAA medical examination. The Examiner is asked to comment on all entries, including those "PREVIOUSLY REPORTED, NO CHANGE." These comments may be entered under Item 60.

ITEM 20. APPLICANT'S NATIONAL DRIVER REGISTER AND CERTIFYING DECLARATION

— NOTICE —	20. Applicant's National Driver Register and Certifying Declarations
Whoever in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or who makes any false, fictitious or fraudulent statements or representations, or entry, may be fined up to $250,000 or imprisoned not more than 5 years, or both, (*18 U.S. Code Secs. 1001; 3571*).	**I hereby authorize the National Driver Register (NDR), through a designated State Department of Motor Vehicles, to furnish to the FAA information pertaining to my driving record. This consent constitutes authorization for a single access to the information contained in the NDR to verify information provided in this application. Upon my request, the FAA shall make the information received from the NDR, if any, available for my review and written comment. Authority: 23 U.S. Code 401, Note.** **NOTE: All persons using this form must sign it. NDR consent, however, does not apply unless this form is used as an application for Medical Certificate or Medical Certificate and Student Pilot Certificate.** **I hereby certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge, and I agree that they are to be considered part of the basis for issuance of any FAA certificate to me. I have also read and understand the Privacy Act statement that accompanies this form.**
	Signature of Applicant / **Date** _____ **MM DD YYYY**

In addition to making a declaration of the completeness and truthfulness of the applicant's responses on the medical application, the applicant's declaration authorizes the National Driver Register to release the applicant's adverse driving history information, if any, to the FAA. The FAA uses such information to verify information provided in the application. The applicant should be instructed to sign Item 20 after reading the declaration. The signature should be in ink. If an applicant does not sign the declaration for any reason, the Examiner shall not issue a medical certificate but forward the incomplete application to the AMCD.

CHAPTER 3

EXAMINATION TECHNIQUES AND CRITERIA FOR QUALIFICATION

ITEMS 21- 48 of FAA Form 8500-8

The Examiner must personally conduct the physical examination. This chapter provides guidance for completion of Items 21-48 of the Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, FAA Form 8500-8.

The Examiner must carefully read the applicant's history page of FAA Form 8500-8 (Items 1-20) *before* conducting the physical examination and completing the Report of Medical Examination. This alerts the Examiner to possible pathological findings.

The Examiner must note in Item 60 of the FAA Form 8500-8 any condition found in the course of the examination. The Examiner must list the facts, such as dates, frequency, and severity of occurrence.

When a question arises, the Federal Air Surgeon encourages Examiners first to check this Guide for Aviation Medical Examiners and other FAA informational documents. If the question remains unresolved, the Examiner should seek advice from a RFS or the Manager of the AMCD.

ITEMS 21-22. HEIGHT AND WEIGHT

21. Height (inches)	22. Weight (pounds)

ITEM 21. Height

Record the applicant's height in inches. Although there are no medical standards for height, exceptionally short individuals may not be able to effectively reach all flight controls and must fly specially modified aircraft. If required, the FAA will place operational limitations on the pilot certificate.

ITEM 22. Weight

Record the applicant's weight in pounds.

ITEMS 23-24. STATEMENT OF DEMONSTRATED ABILITY (SODA); SODA SERIAL NUMBER

23. Statement of Demonstrated Ability (SODA)		
☐ Yes	☐ No	Defect Noted:

ITEM 23. Has a SODA ever been issued?

Ask the applicant if a SODA has ever been issued. If the answer is "yes," ask the applicant to show you the document. Then check the "yes" block and record the nature and degree of the defect.

SODA's are valid for an indefinite period or until an adverse change occurs that results in a level of defect worse than that stated on the face of the document.

The FAA issues SODA's for certain static defects, but not for disqualifying condition or conditions that may be progressive. The extent of the functional loss that has been cleared by the FAA is stated on the face of the SODA. If the Examiner finds the condition has become worse, a medical certificate should not be issued even if the applicant is otherwise qualified. The Examiner should also defer issuance if it is unclear whether the applicant's present status represents an adverse change.

The Examiner must take special care not to issue a medical certificate of a higher class than that specified on the face of the SODA even if the applicant appears to be otherwise medically qualified. The Examiner may note in Item 60 the applicant's desire for a higher class.

ITEM 24. SODA Serial Number

24. SODA Serial Number

Enter the assigned serial number in the space provided.

ITEMS 25-30. EAR, NOSE AND THROAT (ENT)

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
25. Head, face, neck, and scalp		
26. Nose		
27. Sinuses		
28. Mouth and Throat		
29. Ears, general (internal and external canals: Hearing under Item 49)		
30. Ear Drums (Perforation)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.105(b)(c), 67.205(b)(c), and 67.305(b)(c)

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that-

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

II. Examination Techniques

1. The ***head and neck*** should be examined to determine the presence of any significant defects such as:

a. Bony defects of the skull

b. Gross deformities

c. Fistulas

d. Evidence of recent blows or trauma to the head

e. Limited motion of the head and neck

f. Surgical scars

2. The ***external ear*** is seldom a major problem in the medical certification of applicants. Otitis externa or a furuncle may call for temporary disqualification. Obstruction of the

canal by impacted cerumen or cellular debris may indicate a need for referral to an ENT specialist for examination.

The tympanic membranes should be examined for scars or perforations. Discharge or granulation tissue may be the only observable indication of perforation. Middle ear disease may be revealed by retraction, fluid levels, or discoloration. The normal tympanic membrane is movable and pearly gray in color. Mobility should be demonstrated by watching the drum through the otoscope during a valsalva maneuver.

3. Pathology of the ***middle ear*** may be demonstrated by changes in the appearance and mobility of the tympanic membrane. The applicant may only complain of stuffiness of the ears and/or loss of hearing. An upper respiratory infection greatly increases the risk of aerotitis media with pain, deafness, tinnitus, and vertigo due to lessened aeration of the middle ear from eustachian tube dysfunction. When the applicant is taking medication for an ENT condition, it is important that the Examiner become fully aware of the underlying pathology, present status, and the length of time the medication has been used. If the condition is not a threat to aviation safety, the treatment consists solely of antibiotics, and the antibiotics have been taken over a sufficient period to rule out the likelihood of adverse side effects, the Examiner may make the certification decision.

The same approach should be taken when considering the significance of prior surgery such as myringotomy, mastoidectomy, or tympanoplasty. Simple perforation without associated symptoms or pathology is not disqualifying. When in doubt, the Examiner should not hesitate to defer issuance and refer the matter to the AMCD. The services of consultant ENT specialists are available to the FAA to help in determining the safety implications of complicated conditions.

4. **Unilateral Deafness**. An applicant with unilateral cogenital or acquired deafness should not be denied medical certification if able to pass any of the tests of hearing acuity.

5. **Bilateral Deafness**. It is possible for a totally deaf person to qualify for a private pilot certificate. When such an applicant initially applies for medical certification, if otherwise qualified, the AMCD may issue a combination medical/student pilot certificate with the limitation “Valid for Student Pilot Purposes Only.” This will allow the student to practice with an instructor before undergoing a pilot check ride for the private pilot’s license. When the applicant is ready to take the check ride, he/she must contact AMCD or the RFS for authorization to take a medical flight test (MFT). Upon successful completion of the MFT, the applicant will be issued a SODA, and an operational restriction will be placed on his/her pilot’s license that restricts the pilot from flying into airspace requiring radio communication.

6. **Hearing Aids**. Under some circumstances, the use of hearing aids may be acceptable. If the applicant is unable to pass any of the above tests without the use of hearing aids, he or she may be tested using hearing aids.

7. The ***nose*** should be examined for the presence of polyps, blood, or signs of infection, allergy, or substance abuse. The Examiner should determine if there is a history of epistaxis with exposure to high altitudes and if there is any indication of loss of sense of smell (anosmia). Polyps may cause airway obstruction or sinus blockage. Infection or allergy may be cause for obtaining additional history. Anosmia is at least noteworthy in that the airman should be made fully aware of the significance of the handicap in flying (inability to receive early warning of gas spills, oil leaks, or smoke). Further evaluation may be warranted.

8. Evidence of ***sinus*** disease must be carefully evaluated by a specialist because of the risk of sudden and severe incapacitation from barotrauma.

9. The ***mouth and throat*** should be examined to determine the presence of active disease that is progressive or may interfere with voice communications. Gross abnormalities that could interfere with the use of personal equipment such as oxygen equipment should be identified.

10. The ***larynx*** should be visualized if the applicant's voice is rough or husky. Acute laryngitis is temporarily disqualifying. Chronic laryngitis requires further diagnostic workup. Any applicant seeking certification for the first time with a functioning tracheostomy, following laryngectomy, or who uses an artificial voice-producing device should be denied or deferred and carefully assessed.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

ITEM 25. HEAD, FACE, NECK, AND SCALP

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Head, Face, Neck, and Scalp			
Active fistula of neck, either congenital or acquired, including tracheostomy	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Loss of bony substance involving the two tables of the cranial vault	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Deformities of the face or head that would interfere with the proper fitting and wearing of an oxygen mask	1st & 2nd	Submit all pertinent medical information and current status report	Requires FAA Decision
	3rd	Submit all pertinent medical information	If deformity does not interfere with administration of supplemental O^2 - Issue

ITEM 26. NOSE

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Nose			
Evidence of severe allergic rhinitis[1]	All	Submit all pertinent medical information and current status report	Requires FAA Decision

[1] Hay fever controlled solely by desensitization without requiring antihistamines or other medications is not disqualifying. Applicants with seasonal allergies requiring antihistamines may be certified by the Examiner with the stipulation that they not exercise privileges of airman certification within 24 hours of experiencing symptoms requiring treatment or within 24 hours after taking an antihistamine. The Examiner should document this in Item 60. However, non-sedating antihistamines loratadine or fexofenadine may be used while flying, after adequate individual experience has determined that the medication is well tolerated without significant side effects.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Nose			
Obstruction of sinus ostia, including polyps, that would be likely to result in complete obstruction	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 27. SINUSES

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Sinuses - Acute or Chronic			
Sinusitis, intermittent use of topical or non-sedating medication	All	Document medication, dose and absence of side effects	Responds to treatment without any side effects - Issue
Severe-requiring continuous use of medication or effected by barometric changes	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Sinus Tumor			
Benign - Cysts/Polyps	All	If no physiologic effects, submit documentation	Asymptomatic, no observable growth over a 12-month period, no potential for sinus block - Issue
Malignant	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 28. MOUTH AND THROAT

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Mouth and Throat			
Any malformation or condition, including stuttering, that would impair voice communication	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Palate: Extensive adhesion of the soft palate to the pharynx	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 29. EARS, GENERAL

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Inner Ear			
Acute or chronic disease without disturbance of equilibrium and successful miringotomy, if applicable	All	Submit all pertinent medical information	If no physiologic effects - Issue
Acute or chronic disease that may disturb equilibrium	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Motion Sickness	All	Submit all pertinent medical information and current status report	If occurred during flight training and resolved - Issue If condition requires medication - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Mastoids			
Mastoid fistula	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Mastoiditis, acute or chronic	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Middle Ear			
Acoustic Neuroma	All	Submit all pertinent medical information and current status report * See Neurology Table page 111	Requires FAA Decision
Impaired Aeration	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Otitis Media	All	Submit all pertinent medical information and current status report	If acute and resolved – Issue If active or chronic - Requires FAA Decision
Outer Ear			
Impacted Cerumen	All	Submit all pertinent medical information and current status report	If asymptomatic and hearing is unaffected - Issue Otherwise - Requires FAA Decision
Otitis Externa that may progress to impaired hearing or become incapacitating	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 30. EAR DRUMS

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Ear Drums			
Perforation that has associated pathology	All	Establish etiology, treatment, and submit all pertinent medical information	Requires FAA Decision
Perforation which has resolved without any other clinical symptoms	All	Submit all pertinent medical information	If no physiologic effects - Issue

Otologic Surgery. A history of otologic surgery is not necessarily disqualifying for medical certification. The FAA evaluates each case on an individual basis following review of the otologist's report of surgery. The type of prosthesis used, the person's adaptability and progress following surgery, and the extent of hearing acuity attained are all major factors to be considered. Examiners should defer issuance to an applicant presenting a history of otologic surgery for the first time, sending the completed report of medical examination, with all available supplementary information, to the AMCD.

Some conditions may have several possible causes or exhibit multiple symptomatology. Episodic disorders of dizziness or disequilibrium require careful evaluation and consideration by the FAA. Transient processes, such as those associated with acute labyrinthitis or benign positional vertigo may not disqualify an applicant when fully recovered. (Also see Item 46, page 100 for a discussion of syncope and vertigo).

ITEMS 31-34. EYE

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
31. Eyes, general (vision under Items 50 to 54)		
32. Ophthalmoscopic		
33. Pupils (Equity and reaction)		
34. Ocular motility (Associated parallel movement nystagmus)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.103(e), 67.203(e), and 67.303(d)

(e) No acute or chronic pathological condition of either the eye or adnexa that interferes with the proper function of the eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

II. Examination Techniques

For guidance regarding the conduction of visual acuity, field of vision, heterophoria, and color vision tests, please refer to Chapter 4, Items 50-54, page 130.

The examination of the eyes should be directed toward the discovery of diseases or defects that may cause a failure in visual function while flying or discomfort sufficient to interfere with safely performing airman duties.

The Examiner should personally explore the applicant's history by asking questions concerning any changes in vision, unusual visual experiences (halos, scintillations, etc.), sensitivity to light, injuries, surgery, or current use of medication. Does the applicant report inordinate difficulties with eye fatigue or strain? Is there a history of serious eye disease such as glaucoma or other disease commonly associated with secondary eye changes, such as diabetes? (Also see Item 53, page 139; and Item 54, page 141).

1. It is recommended that the Examiner consider the following signs during the course of the eye examination:

a. *Color* — redness or suffusion of allergy, drug use, glaucoma, infection, trauma, jaundice, ciliary flush of Iritis, and the green or brown Kayser-Fleischer Ring of Wilson's disease.

b. *Swelling* — abscess, allergy, cyst, exophthalmos, myxedema, or tumor.

c. *Other* — clarity, discharge, dryness, ptosis, protosis, spasm (tic), tropion, or ulcer.

2. Ophthalmoscopic examination. It is suggested that a routine be established for ophthalmoscopic examinations to aid in the conduct of a comprehensive eye assessment. Routine use of a mydriatic is not recommended.

a. *Cornea* — observe for abrasions, calcium deposits, contact lenses, dystrophy, keratoconus, pterygium, scars, or ulceration. Contact lenses should be removed several hours before examination of the eye. (See Item 50, page 130).

b. *Pupils and Iris* — check for the presence of synechiae and uveitis. Size, shape, and reaction to light should be evaluated during the ophthalmoscopic examination. Observe for coloboma, reaction to light, or disparity in size.

c. *Aqueous* — hyphema or iridocyclitis.

d. *Lens* — observe for aphakia, discoloration, dislocation, cataract, or an implanted lens.

e. *Vitreous* — note discoloration, hyaloid artery, floaters, or strands.

f. *Optic nerve* — observe for atrophy, hemorrhage, cupping, or papilledema.

g. *Retina and choroid* — examine for evidence of coloboma, choroiditis, detachment of the retina, diabetic retinopathy, retinitis, retinitis pigmentosa, retinal tumor, macular or other degeneration, toxoplasmosis, etc.

3. Ocular Motility. Motility may be assessed by having the applicant follow a point light source with both eyes, the Examiner moving the light into right and left upper and lower quadrants while observing the individual and the conjugate motions of each eye. The Examiner then brings the light to center front and advances it toward the nose observing for convergence. End point nystagmus is a physiologic nystagmus and is not considered to be significant. It need not be reported. (See Item 50, page 130 for further consideration of nystagmus).

4. Monocular Vision. An applicant will be considered monocular when there is only one eye or when the best corrected distant visual acuity in the poorer eye is no better than 20/200. An individual with one eye, or effective visual acuity equivalent to monocular, may be considered for medical certification, any class, through the special issuance section of part 67 (14 CFR 67.401). See AASI for History of Monocularity.

In amblyopia ex anopsia, the visual acuity loss is simply recorded in Item 50 of FAA Form 8500-8, and visual standards are applied as usual. If the standards are not met, a Report of Eye Evaluation, FAA Form 8500-7, should be submitted for consideration.

Although it has been repeatedly demonstrated that binocular vision is not a prerequisite for flying, some aspects of depth perception, either by stereopsis or by monocular cues, are necessary. It takes time for the monocular airman to develop the techniques to interpret the monocular cues that substitute for stereopsis; such as, the interposition of objects, convergence, geometrical perspective, distribution of light and shade, size of known objects, aerial perspective, and motion parallax.

In addition, it takes time for the monocular airman to compensate for his or her decrease in effective visual field. A monocular airman's effective visual field is reduced by as much as 30% by monocularity. This is especially important because of speed smear; i.e., the effect of speed diminishes the effective visual field such that normal visual field is decreased from 180 degrees to as narrow as 42 degrees or less as speed increases. A monocular airman's reduced effective visual field would be reduced even further than 42 degrees by speed smear.

For the above reasons, a waiting period of 6 months is recommended to permit an adequate adjustment period for learning techniques to interpret monocular cues and accommodation to the reduction in the effective visual field.

Applicants who have had monovision secondary to refractive surgery may be certificated, providing they have corrective vision available that would provide binocular vision in accordance with the vision standards, while exercising the privileges of the certificate. The certificate issued must have the appropriate vision limitations statement.

5. Contact Lenses. The use of a contact lens in one eye for distant visual acuity (monovision) and another in the other eye for near or intermediate visual acuity is not acceptable for aviation duties. Experience has indicated no significant risk to aviation safety in the use of contact lenses for distant vision correction. As a consequence, no special evaluation is routinely required before the use of contact lenses is authorized, and no SODA is required or issued to a contact lens wearer who meets the standards and has no complications.

Designer contact lenses that introduce color (tinted lenses), restrict the field of vision, or significantly diminish transmitted light, are not acceptable.

Bifocal contact lenses or contact lenses that correct for near and/or intermediate vision only are **not** considered acceptable for aviation duties.

6. Glaucoma. The Examiner should deny or defer issuance of a medical certificate to an applicant if there is a loss of visual fields, a significant change in visual acuity, a diagnosis of or treatment for glaucoma, or newly diagnosed intraocular hypertension.

The FAA may grant an Authorization under the special issuance section of part 67 (14 CFR 67.401) on an individual basis. The Examiner can facilitate FAA review by obtaining a report of Ophthalmological Evaluation for Glaucoma (FAA Form 8500-14) from a treating or evaluating ophthalmologist, also see AME assisted protocol for third-class airmen. Because secondary glaucoma is caused by known pathology such as; uveitis or trauma, eligibility must largely depend upon that pathology. Secondary glaucoma is often unilateral, and if the cause or disease process is no longer active and the other eye remains normal certification is likely.

Applicants with primary or secondary narrow angle glaucoma are usually denied because of the risk of an attack of angle closure, because of incapacitating symptoms of severe pain, nausea, transitory loss of accommodative power, blurred vision, halos, epiphora, or iridoparesis. Central venous occlusion can occur with catastrophic loss of vision. However, when surgery such as iridectomy or iridencleisis has been performed satisfactorily more than 3 months before the application, the likelihood of difficulties is considerably more remote, and applicants in that situation may be favorably considered by the FAA.

An applicant with unilateral or bilateral open angle glaucoma may be certified by the FAA (with follow-up required) when a current ophthalmological report substantiates that pressures are under adequate control, there is little or no visual field loss or other complications, and the person tolerates small to moderate doses of allowable medications. Individuals who have had filter surgery for their glaucoma, or combined

glaucoma/cataract surgery, can be considered when stable and without complications. A few applicants have been certified following their demonstration of adequate control with oral medication. Neither miotics nor mydriatics are necessarily medically disqualifying.

However, miotics such as pilocarpine cause pupillary constriction and could conceivably interfere with night vision. Although the FAA no longer routinely prohibits pilots who use such medications from flying at night, it may be worthwhile for the Examiner to discuss this aspect of the use of miotics with applicants. If considerable disturbance in night vision is documented, the FAA may limit the medical certificate: NOT VALID FOR NIGHT FLYING

7. Sunglasses. Sunglasses are not acceptable as the only means of correction to meet visual standards, but may be used for backup purposes if they provide the necessary correction. Airmen should be encouraged to use sunglasses in bright daylight but must be cautioned that, under conditions of low illumination, they may compromise vision. Mention should be made that sunglasses do not protect the eyes from the effects of ultra violet radiation without special glass or coatings and that photosensitive lenses are unsuitable for aviation purposes because they respond to changes in light intensity too slowly. The so-called "blue blockers" may not be suitable since they block the blue light used in many current panel displays. Polarized sunglasses are unacceptable if the windscreen is also polarized.

8. Refractive Surgery. An applicant who has been treated with refractive surgery may be issued a medical certificate by the Examiner if the applicant meets the visual acuity standards and the Report of Eye Evaluation (FAA Form 8500-7) indicates that healing is complete, visual acuity remains stable, and the applicant does not suffer sequela such as; glare intolerance, halos, rings, impaired night vision, or any other complications. This state of recovery is usually reached within 6- to 12-weeks after surgery. The Examiner may, of course, defer issuance and forward the ophthalmology report to the AMCD.

General Information: Applicants with many of the foregoing conditions may be found qualified for FAA certification following the receipt and review of specialty evaluations and pertinent medical records. Examples include retinal detachment with surgical correction, open angle glaucoma under adequate control with medication, and narrow angle glaucoma following surgical correction.

The Examiner may not issue a certificate under such circumstances for the initial application, except in the case of applicants following cataract surgery. The Examiner may issue a certificate after cataract surgery for applicants who have undergone cataract surgery with or without lens(es) implant. If pertinent medical records and a current ophthalmologic evaluation (using FAA Form 8500-7 or FAA Form 8500-14) indicate that the applicant meets the standards, the FAA may delegate authority to the Examiner to issue subsequent certificates.

If there is a question regarding the need for a current specialty evaluation, the Examiner should not obtain the evaluation, but should instead transmit the completed application (FAA Form 8500-8) and forward any available medical records to the AMCD.

III. Aerospace Medical Disposition

Applicants with many visual conditions may be found qualified for FAA certification following the receipt and review of specialty evaluations and pertinent medical records. Examples include retinal detachment with surgical correction, open angle glaucoma under adequate control with medication, and narrow angle glaucoma following surgical correction.

The Examiner may not issue a certificate under such circumstances for the initial application, except in the case of applicants following cataract surgery. The Examiner may issue a certificate after cataract surgery for applicants who have undergone cataract surgery with or without lens(es) implant. If pertinent medical records and a current ophthalmologic evaluation (using FAA Form 8500-7 or FAA Form 8500-14) indicate that the applicant meets the standards, the FAA may delegate authority to the Examiner to issue subsequent certificates.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

ITEM 31. EYES, GENERAL

DISEASE/CONDITION	CLASS	EVALUTION DATA	DISPOSITION
Eyes, General			
Amblyopia[2] Initial certification	All	Provide completed FAA Form 8500-7 Note: applicant should be at best corrected visual acuity before evaluation	If applicant does not correct to standards, add the following limitation to the medical certificate: "Valid for Student Pilot Purposes Only, " and request a medical flight test

[2] In amblyopia ex anopsia, the visual acuity of one eye is decreased without presence of organic eye disease, usually because of strabismus or anisometropia in childhood.

DISEASE/CONDITION	CLASS	EVALUTION DATA	DISPOSITION
Eyes, General			
Any ophthalmic pathology reflecting a serious systemic disease (e.g., diabetic and hypertensive retinopathy)	All	Submit all pertinent medical information and current status report. (If applicable, see Diabetes and Hypertensive Protocols)	Requires FAA Decision
Aphakia/Lens Implants	All	Submit all pertinent medical information and current status report (See additional disease dependent requirements)	If visual acuity meets standards - Issue Otherwise - Requires FAA Decision
Diplopia	All	If applicant provides written evidence that the FAA has previously considered and determined that this condition is not adverse to flight safety. A MFT may be requested.	Contact RFS for approval to Issue Otherwise - Requires FAA Decision
Hereditary, acquired conditions or congenital[3]	All	Provide completed FAA Form 8500-7 Note: applicant should be at best corrected visual acuity before evaluation	Requires FAA Decision
Pterygium	All	Document findings in Item #60	If less than 50% of the cornea and not effecting central vision - Issue Otherwise - Requires FAA Decision

[3] Whether acute or chronic, of either eye or adnexa, that may interfere with visual functions, may progress to that degree, or may be aggravated by flying (tumors and ptosis obscuring the pupil, acute inflammatory disease of the eyes and lids, cataracts, or orthokeratology).

DISEASE/CONDITION	CLASS	EVALUTION DATA	DISPOSITION
Eyes, General			
Refractive Surgery	All	Provide completed FAA Form 8500-7, type and date of procedure, statement as to any complications (halo, glare, haze, rings, etc.)	If visual acuity meets standards, is stable, and no complications exist - Issue Otherwise - Requires FAA Decision

ITEM 32. OPHTHALMOSCOPIC

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Ophthalmoscopic				
Chorioretinitis; Coloboma; Corneal Ulcer or Dystrophy; Optic Atrophy or Neuritis; Retinal Degeneration or Detachment; Retinitis Pigmentosa; Papilledema; or Uveitis	All	Submit all pertinent medical information and current status report	Requires FAA Decision	
Glaucoma (treated or untreated)	1st & 2nd	Submit all pertinent medical information and current status report	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Macular Degeneration; Macular Detachment	All	Submit all pertinent medical information and current status report	Requires FAA Decision	
Tumors	All	Submit all pertinent medical information and current status report	Requires FAA Decision	
Vascular Occlusion; Retinopathy	All	Submit all pertinent medical information and current status report	Requires FAA Decision	

ITEM 33. PUPILS

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Pupils			
Disparity in size or reaction to light (afferent pupillary defect) requires clarification and/or further evaluation	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Nonreaction to light in either eye acute or chronic	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Nystagmus[4]	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Synechiae, anterior or posterior	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 34. OCULAR MOTILITY

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Ocular Motility			
Absence of conjugate alignment in any quadrant	All	Submit all pertinent medical information and current status report	Requires FAA Decision

[4]Nystagmus of recent onset is cause to deny or defer certificate issuance. Any recent neurological or other evaluations available to the Examiner should be submitted to the AMCD. If nystagmus has been present for a number of years and has not recently worsened, it is usually necessary to consider only the impact that the nystagmus has upon visual acuity. The Examiner should be aware of how nystagmus may be aggravated by the forces of acceleration commonly encountered in aviation and by poor illumination.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Ocular Motility			
Inability to converge on a near object	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Paralysis with loss of ocular motion in any direction	All	Submit all pertinent medical information and current status report	Requires FAA Decision

ITEM 35. LUNGS AND CHEST

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
35. Lungs and chest (Not including breasts examination)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges;

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Breast examination: The breast examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a breast examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8. The applicant should be advised of any abnormality that is detected, then deferred for further evaluation.

III. Aerospace Medical Dispositions

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Allergies			
Allergies, severe	All	Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects	Requires FAA Decision

<table>
<tr><th>DISEASE/CONDITION</th><th>CLASS</th><th>EVALUATION DATA</th><th colspan="2">DISPOSITION</th></tr>
<tr><td colspan="5">Allergies</td></tr>
<tr><td>Hay fever controlled solely by desensitization without antihistamines or other medications[5][6][7]</td><td>All</td><td>Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects</td><td colspan="2">If responds to treatment and without side effects - Issue

Otherwise - Requires FAA Decision</td></tr>
<tr><td colspan="5">Asthma</td></tr>
<tr><td rowspan="2">Frequent severe asthmatic symptoms</td><td>1st & 2nd</td><td rowspan="2">Submit all pertinent medical information and current status report, include PFT’s, duration of symptoms, name and dosage of drugs and side effects</td><td colspan="2">Requires FAA Decision</td></tr>
<tr><td>3rd</td><td>INITIAL</td><td>FOLLOWUP</td></tr>
<tr><td></td><td></td><td></td><td>Defer</td><td>AASI</td></tr>
</table>

[5] Applicants with seasonal allergies requiring antihistamines may be certified by the Examiner with the stipulation that they not exercise privileges of airman certification within 24 hours of experiencing symptoms requiring treatment or within 24 hours after taking an antihistamine. The Examiner should document this in Item 60.

[6] Individuals who have hay fever that requires only occasional seasonal therapy may be certified by the Examiner with the stipulation that they not fly during the time when symptoms occur and treatment is required.

[7] Nonsedating antihistamines including loratadine, or fexofenadine may be used while flying, after adequate individual experience has determined that the medication is well tolerated without significant side effects.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Asthma				
Mild or seasonal asthmatic symptoms[8]	All	Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs, and side effects	If attacks are infrequent and no symptoms in flight - Issue	
Chronic Obstructive Pulmonary Disease (COPD)				
Chronic bronchitis, emphysema, or COPD[9]	1st & 2nd	Submit all pertinent medical information and current status report. Include an FVC/FEV1	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Infectious Disease of the Lungs, Pleura, or Mediastinum				
Abscesses Active Mycotic disease Active Tuberculosis	All	Submit all pertinent medical information and current status report	Requires FAA Decision	
Fistula, Bronchopleural, to include Thoracostomy	All	Submit all pertinent medical information and current status report	Requires FAA Decision	

[8] If the applicant otherwise meets the medical standards and currently requires no treatment, the Examiner may Issue. However, a history of frequent severe attacks is disqualifying. Certificate issuance may be possible in other cases. If additional information is obtained, it must be submitted to the FAA.

[9] Certification may be granted, by the FAA, when the condition is mild without significant impairment of pulmonary functions. If the applicant has frequent exacerbations or any degree of exertional dyspnea, certification should be deferred.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Infectious Disease of the Lungs, Pleura, or Mediastinum				
Lobectomy	All	Submit all pertinent medical information and current status report, include PFT	Requires FAA Decision	
Pulmonary Fibrosis	All	Submit all pertinent medical information, current status report, PFT's with diffusion capacity	If >75% predicted and no impairment - Issue Otherwise - Requires FAA Decision	
Sleep Apnea				
Obstructive Sleep Apnea	1st & 2nd	Submit all pertinent medical information and current status report. Include sleep study with a polysonogram, use of medications and titration study results	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Periodic Limb Movement, etc.	All	Submit all pertinent medical information and current status report. Include sleep study with a polysonogram, use of medications and titration study results, along with a statement regarding Restless Leg Syndrome	Requires FAA Decision	

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Pleura and Pleural Cavity			
Acute fibrinous pleurisy; Empyema; Pleurisy with effusion; or Pneumonectomy	All	Submit all pertinent medical information and current status report, and PFT's	Requires FAA Decision
Malignant tumors or cysts of the lung, pleura, mediastinum, or the breast	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Other diseases or defects of the lungs or chest wall that require use of medication or that could adversely affect flying or endanger the applicant's well-being if permitted to fly	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Pneumothorax - Traumatic	All	Submit all pertinent medical information and current status report	If 3 months after resolution - Issue
Sarcoid, if more than minimal involvement or if symptomatic	All	Submit all pertinent medical information and current status report	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Pleura and Pleural Cavity			
Spontaneous pneumothorax[10]	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Pulmonary			
Bronchiectasis	All	Submit all pertinent medical information and current status report	If moderate to severe - Requires FAA Decision

[10] A history of a single episode of spontaneous pneumothorax is considered disqualifying for airman medical certification until there is x-ray evidence of resolution and until it can be determined that no condition that would be likely to cause recurrence is present (i.e., residual blebs). On the other hand, an individual who has sustained a repeat pneumothorax normally is not eligible for certification until surgical interventions are carried out to correct the underlying problem. A person who has such a history is usually able to resume airmen duties 3 months after the surgery. No special limitations on flying at altitude are applied.

ITEM 36. HEART

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
36. Heart (Precordial activity, rhythm, sounds, and murmurs)		

I. Code of Federal Regulations:

First-Class: 14 CFR 67.111(a)(b)(c)

Cardiovascular standards for first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Myocardial infarction

(2) Angina pectoris

(3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant

(4) Cardiac valve replacement

(5) Permanent cardiac pacemaker implantation; or

(6) Heart replacement

(b) A person applying for first-class airman medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:

(1) At the first application after reaching the 35th birthday; and

(2) On an annual basis after reaching the 40th birthday

(c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Second- and Third-Class: 14 CFR 67.211(a)(b)(c)(d)(e)(f) and 67.311(a)(b)(c)(d)(e)(f)

Cardiovascular standards for a second- and third-class airman medical certificate are no established medical history or clinical diagnosis of any of the following:

(a) Myocardial infarction

(b) Angina pectoris

(c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant

(d) Cardiac valve replacement

(e) Permanent cardiac pacemaker implantation; or

(f) Heart replacement

II. Examination Techniques

A. General Physical Examination.

1. A brief description of any comment-worthy personal characteristics as well as height, weight, representative blood pressure readings in both arms, funduscopic examination, condition of peripheral arteries, carotid artery auscultation, heart size, heart rate, heart rhythm, description of murmurs (location, intensity, timing, and opinion as to significance), and other findings of consequence must be provided.

2. The Examiner should keep in mind some of the special cardiopulmonary demands of flight, such as changes in heart rates at takeoff and landing. High G-forces of aerobatics or agricultural flying may stress both systems considerably. Degenerative changes are often insidious and may produce subtle performance decrements that may require special investigative techniques.

a. Inspection. Observe and report any thoracic deformity (e.g., pectus excavatum), signs of surgery or other trauma, and clues to ventricular hypertrophy. Check the hematopoietic and vascular system by observing for pallor, edema, varicosities, stasis ulcers, and venous distention. Check the nail beds for capillary pulsation and color.

b. Palpation. Check for thrills and the vascular system for arteriosclerotic changes, shunts, or AV anastomoses. The pulses should be examined to determine their character, to note if they are diminished or absent, and to observe for synchronicity. The medical standards do not specify pulse rates that, per se, are disqualifying for medical certification. These tests are used,

however, to determine the status and responsiveness of the cardiovascular system. Abnormal pulse rates may be reason to conduct additional cardiovascular system evaluations.

(1). Bradycardia of less than 50 beats per minute, any episode of tachycardia during the course of the examination, and any other irregularities of pulse other than an occasional ectopic beat or sinus arrhythmia must be noted and reported. If there is bradycardia, tachycardia, or arrhythmia further evaluation may be warranted and deferral may be indicated.

(2). A cardiac evaluation may be needed to determine the applicant's qualifications. Temporary stresses or fever may, at times, result in abnormal results from these tests. If the Examiner believes this to be the case, the applicant should be given a few days to recover and then be retested. If this is not possible, the Examiner should defer issuance, pending further evaluation.

c. Percussion. Determine heart size, diaphragmatic elevation/excursion, abnormal densities in the pulmonary fields, and mediastinal shift.

d. Auscultation. Check for resonance, asthmatic wheezing, ronchi, rales, cavernous breathing of emphysema, pulmonary or pericardial friction rubs, quality of the heart sounds, murmurs, heart rate, and rhythm. If a murmur is discovered during the course of conducting a routine FAA examination, report its character, loudness, timing, transmission, and change with respiration. It should be noted whether it is functional or organic and if a special examination is needed. If the latter is indicated, the Examiner should defer issuance of the medical certificate and transmit the completed FAA Form 8500-8 to the FAA for further consideration. Listen to the neck for bruits.

It is recommended that the Examiner conduct the auscultation of the heart with the applicant both in a sitting and in a recumbent position.

Aside from murmur, irregular rhythm, and enlargement, the Examiner should be careful to observe for specific signs that are pathognomonic for specific disease entities or for serious generalized heart disease. Examples of such evidence are: (1) the opening snap at the apex or fourth left intercostal space signifying mitral stenosis; (2) gallop rhythm indicating serious impairment of cardiac function; and (3) the middiastolic rumble of mitral stenosis.

B. When General Examinations Reveal Heart Problems.

These specifications have been developed by the FAA to determine an applicant's eligibility for airman medical certification. Standardization of examination methods and reporting is essential to provide sufficient basis for making determinations and the prompt processing of applications.

1. This cardiovascular evaluation, therefore, must be reported in sufficient detail to permit a clear and objective evaluation of the cardiovascular disorder(s) with emphasis on the degree of functional recovery and prognosis. It should be forwarded to the FAA immediately upon completion. Inadequate evaluation, reporting, or failure to promptly submit the report to the FAA may delay the certification decision.

a. Medical History. Particular reference should be given to cardiovascular abnormalities-cerebral, visceral, and/or peripheral. A statement must be included as to whether medications are currently or have been recently used, and if so, the type, purpose, dosage, duration of use, and other pertinent details must be provided. A specific history of any anticoagulant drug therapy is required. In addition, any history of hypertension must be fully developed and if thiazide diuretics are being taken, values for serum potassium should be reported, as well as any important or unusual dietary programs.

b. Family, Personal, and Social History. A statement of the ages and health status of parents and siblings is required; if deceased, cause and age at death should be included. Also, any indication of whether any near blood relative has had a "heart attack," hypertension, diabetes, or known disorder of lipid metabolism must be provided. Smoking, drinking, and recreational habits of the applicant are pertinent as well as whether a program of physical fitness is being maintained. Comments on the level of physical activities, functional limitations, occupational, and avocational pursuits are essential.

c. Records of Previous Medical Care. If not previously furnished to the FAA, a copy of pertinent hospital records as well as out-patient treatment records with clinical data, x-ray, laboratory observations, and originals or copies of all electrocardiographic (ECG) tracings should be provided. Detailed reports of surgical procedures as well as cerebral and coronary arteriography and other major diagnostic studies are of prime importance.

d. Surgery. The presence of an aneurysm or obstruction of a major vessel of the body is disqualifying for medical certification of any class. Following successful surgical intervention and correction, the applicant may ask for FAA consideration. The FAA recommends that the applicant recover for at least 3 months for ATCS's and 6 months for airmen.

A history of coronary artery bypass surgery is disqualifying for certification. Such surgery does not negate a past history of coronary heart disease. The presence of

permanent cardiac pacemakers and artificial heart valves is also disqualifying for certification.

The FAA will consider an Authorization for a Special Issuance of a Medical Certificate (Authorization) for most cardiac conditions. Applicants seeking further FAA consideration should be prepared to submit all past records and a report of a complete current cardiovascular evaluation in accordance with FAA specifications.

C. Medication.

1. Medications acceptable to the FAA for treatment of hypertension in applicants include all Food and Drug Administration (FDA) approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (such as, reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are usually **not** acceptable to the FAA. Dosage levels should be the minimum necessary to obtain optimal clinical control and should not be modified to influence the certification decision.

2. The Examiner may submit for the Federal Air Surgeon's review requests for Authorization under the special issuance section of part 67 (14 CFR 67.401) in cases in which these or other usually unacceptable medications are used. Specialty evaluations are required in such cases and must provide information on why the specific drug is required. The Examiner's own recommendation should be included. The Examiner must defer issuance of a medical certificate to any applicant whose hypertension is being treated with unacceptable medications. The use of nitrates for the treatment for coronary artery disease or to modify hemodynamics is unacceptable.

The use of flecainide is unacceptable when there is evidence of left ventricular dysfunction or recent myocardial infarction.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Arrhythmias			
Bradycardia (<50 bpm)	All	Document history and findings, CVE Protocol, and submit any tests deemed appropriate	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
Left Bundle Branch Block	All	CVE Protocol and radionuclide GXT scan	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
Acquired Right Bundle Branch Block	All	CVE Protocol and radionuclide GXT scan	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
History of Implanted Pacemakers	All	See Implanted Pacemaker Protocol	Requires FAA Decision
PAC (2 or more on ECG)	All	Requires evaluation, e.g., check for MVP, caffeine, pulmonary disease, thyroid, etc.	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
PVC's (2 or more on standard ECG)	All	Max GXT – to include a baseline ECG	If no evidence of structural, functional or coronary heart disease and PVC's resolve with exercise - Issue Otherwise - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Arrhythmias			
1st Degree AV Block	All	Document history and findings, CVE Protocol, and submit any tests deemed appropriate	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
2nd Degree AV Block Mobitz I	All	Document history and findings, CVE Protocol, and submit any tests deemed appropriate	If no evidence of structural, functional or coronary heart disease - Issue Otherwise - Requires FAA Decision
2nd Degree AV Block Mobitz II	All	CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter	Requires FAA Decision
3rd Degree AV Block	All	CVE Protocol in accordance w/ Hypertensive Evaluation Specifications and 24-hour Holter	Requires FAA Decision
Preexcitation	All	CVE Protocol, GXT, and 24-hour Holter	Requires FAA Decision
RF Ablation	All	3-month wait, then 24-hour Holter	If Holter negative for arrhythmia, no recurrence – Issue Otherwise - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Arrhythmias				
Supraventricular Tachycardia	1st & 2nd	CHD Protocol with ECHO and 24-hour Holter	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Syncope	All	CHD Protocol with ECHO and 24-hour Holter; bilat-carotid US * See Neurology Table, page 109	Requires FAA Decision	
Atrial Fibrillation				
History of Atrial Fibrillation >5 years ago	All	Document previous workup for CAD and structural heart disease	If no ischemia, no history of emboli, no structural or functional heart disease - Issue Otherwise - Requires FAA Decision	
Chronic	All	CHD Protocol with ECHO and 24-hour Holter	Requires FAA Decision	
Paroxysmal/Lone	1st & 2nd	CHD Protocol with ECHO and 24-hour Holter	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI

NOTE: Syncope, not satisfactorily explained or recurrent requires deferral (even though the syncope episode may be medically explained, an aeromedical certification decision may still be precluded). Syncope may involve cardiovascular, neurological, and psychiatric factors.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Coronary Heart Disease			
Angina Pectoris	All	See CHD Protocol	Requires FAA Decision
Myocardial Infarct	All	See CHD Protocol	Requires FAA Decision
Atherectomy; CABG; PTCA; Rotoblation; or STENT	All	See CHD Protocol	Requires FAA Decision
Hypertension			
Hypertension requiring medication		See Hypertension Protocol	If controlled and no complications - Issue Otherwise - Requires FAA Decision
Valvular Disease			
All Other Valvular Disease	All	CHD Protocol with ECHO	Requires FAA Decision
Aortic and Mitral Insufficiency	1ST & 2nd	CHD Protocol with ECHO	Requires FAA Decision
	3rd		**INITIAL** / **FOLLOWUP**
			Defer / AASI
Valve Replacement	All	See Valve Replacement Protocol	Requires FAA Decision
Valvuloplasty	All	See Valvuloplasty Protocol	Requires FAA Decision

Other Cardiac Conditions

The following conditions must be deferred:

1. Heart Transplant – at the present time, due to the unpredictability of segmental coronary artery disease, certification is not being granted.

2. Cardiac decompensation.

3. Congenital heart disease accompanied by cardiac enlargement, ECG abnormality, or evidence of inadequate oxygenation.

4. Hypertrophy or dilatation of the heart as evidenced by clinical examination and supported by diagnostic studies.

5. Pericarditis, endocarditis, or myocarditis.

6. When cardiac enlargement or other evidence of cardiovascular abnormality is found, the decision is deferred to AMCD or RFS. If the applicant wishes further consideration, a consultation will be required "preferably" from the applicant's treating physician. It must include a narrative report of evaluation and be accompanied by an ECG with report and appropriate laboratory test results which may include, as appropriate, 24-hour Holter monitoring, thyroid function studies, ECHO, and an assessment of coronary artery status. The report and accompanying materials should be forwarded to the AMCD or RFS.

7. Anti-tachycardia devices or implantable defibrillators.

8. With the possible exceptions of aspirin and dipyridamole taken for their effect on blood platelets, the use of anticoagulants or other drugs for treatment or prophylaxis of fibrillation may preclude medical certification.

9. A history of cardioversion or drug treatment, *per se,* does not rule out certification. A current, complete cardiovascular evaluation will be required. A 3-month observation period must elapse after the procedure before consideration for certification.

10. Any other cardiac disorder not otherwise covered in this section.

For all classes, certification decisions will be based on the applicant's medical history and current clinical findings. Certification is unlikely unless the information is highly favorable to the applicant. Evidence of extensive multi-vessel disease, impaired cardiac functioning, precarious coronary circulation, etc., will preclude certification. Before an applicant undergoes coronary angiography, it is recommended that all records and the report of a current cardiovascular evaluation, including a maximal electrocardiographic exercise stress test, be submitted to the FAA for preliminary review. Based upon this information, it may be possible to advise an applicant of the likelihood of favorable consideration.

A history of low blood pressure requires elaboration. If the Examiner is in doubt, it is usually better to defer issuance rather than to deny certification for such a history.

ITEM 37. VASCULAR SYSTEM

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
37. Vascular System		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds —

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges;

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

1. Inspection. Observe and report any thoracic deformity (e.g., pectus excavatum), signs of surgery or other trauma, and clues to ventricular hypertrophy. Check the hematopoietic and vascular system by observing for pallor, edema, varicosities, stasis ulcers, venous distention, nail beds for capillary pulsation, and color.

2. Palpation. Check for thrills and the vascular system for arteriosclerotic changes, shunts or AV anastomoses. The pulses should be examined to determine their character, to note if they are diminished or absent, and to observe for synchronicity.

3. Percussion. N/A.

4. Auscultation. Check for bruits and thrills.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITIONS	CLASS	EVALUATION DATA	DISPOSITION
Vascular Conditions			
Aneurysm (Abdominal or Thoracic)	All	Submit all available medical documentation	Requires FAA Decision
Aneurysm (Status Post Repair)	All	Submit all documentation in accordance with CVE Protocol, and include a GXT	Requires FAA Decision
Arteriosclerotic Vascular disease with evidence of circulatory obstruction	All	Submit all documentation in accordance with CVE Protocol, and include a GXT	Requires FAA Decision
Buerger's Disease	All	Document history and findings	If no impairment and no symptoms in flight - Issue Otherwise - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Vascular Conditions			
Peripheral Edema	All	The underlying medical condition must not be disqualifying	If findings can be explained by normal physiologic response or secondary to medication(s) - Issue Otherwise – Requires FAA Decision
Raynaud's Disease	All	Document history and findings	If no impairment - Issue Otherwise - Requires FAA Decision
Phlebothrombosis or Thrombophlebitis	1st & 2nd	See Thrombophlebitis Protocol	Requires FAA Decision
	3rd	Document history and findings Document history and findings. See Thrombophlebitis Protocol	A single episode resolved, not currently treated with anticoagulants, and a negative evaluation - Issue If history of multiple episodes - Requires FAA Decision

ITEM 38. ABDOMEN AND VISCERA

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
38. Abdomen and viscera (including hernia)		

The digital rectal examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a digital examination is performed, the results are to be recorded in Item 59 of FAA Form 8500-8.

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

1. Observation: The Examiner should note any unusual shape or contour, skin color, moisture, temperature, and presence of scars. Hernias, hemorrhoids, and fissure should be noted and recorded.

A history of acute gastrointestinal disorders is usually not disqualifying once recovery is achieved, e.g., acute appendicitis.

Many chronic gastrointestinal diseases may preclude issuance of a medical certificate (e.g., cirrhosis, chronic hepatitis, malignancy, ulcerative colitis). Colostomy following surgery for cancer may be allowed by the FAA with special followup reports.

The Examiner should not issue a medical certificate if the applicant has a recent history of bleeding ulcers or hemorrhagic colitis. Otherwise, ulcers must not have been active within the past 3 months.

In the case of a history of bowel obstruction, a report on the cause and present status of the condition must be obtained from the treating physician.

2. Palpation: The Examiner should check for and note enlargement of organs, unexplained masses, tenderness, guarding, and rigidity.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Abdomen and Viscera and Anus Conditions				
Cholelithiasis	All	Document history and findings	If asymptomatic - Issue Otherwise - Requires FAA Decision	
Cirrhosis (Alcoholic)	All	See Substance Abuse/Dependence Disposition in Item 47, page 117	Requires FAA Decision	
Cirrhosis (Non-Alcoholic)	All	Submit all pertinent medical records, current status report, to include history of encephalopathy; PT/PTT; albumin; liver enzymes; bilirubin; CBC; and other testing deemed necessary	Requires FAA Decision	
Hepatitis	All	Submit all pertinent medical records, current status report to include any other testing deemed necessary	If disease is resolved without sequela - Issue Otherwise - Requires FAA Decision	
Hepatitis C	1st & 2nd	Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Abdomen and Viscera and Anus Conditions			
Inguinal, Ventral or Hiatal Hernia	All	Document history and findings	If symptomatic; likely to cause any degree of obstruction - Requires FAA Decision Otherwise - Issue
Liver Transplant	All	Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects	Requires FAA decision
Splenomegaly	All	Provide hematologic workup	Requires FAA Decision
Malignancies			
Colitis (Ulcerative, Regional Enteritis or Crohn's disease)	1st & 2nd	Submit all pertinent medical information and current status report, include duration of symptoms, name and dosage of drugs and side effects	Requires FAA Decision
	3rd		**INITIAL**: Defer **FOLLOWUP**: AASI
Colon/Rectal Cancer	1st & 2nd	Submit all pertinent medical records, operative/ pathology reports, current oncological status report; and current CEA and CBC	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Malignancies			
Other Malignancies	All	Submit all pertinent medical records, operative/ pathology reports, current oncological status report, including tumor markers, and any other testing deemed necessary	Requires FAA Decision
Peptic Ulcer	All	See Peptic Ulcer Protocol	Requires FAA Decision

An applicant with an ileostomy or colostomy may also receive FAA consideration. A report is necessary to confirm that the applicant has fully recovered from the surgery and is completely asymptomatic.

In the case of a history of bowel obstruction, a report on the cause and present status of the condition must be obtained from the treating physician.

ITEM 39. ANUS

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
39 Anus (Not including digital examination)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

1. Digital Rectal Examination: This examination is performed only at the applicant's option unless indicated by specific history or physical findings. When performed, the following should be noted and recorded in Item 59 of FAA Form 8500-8.

2. If the digital rectal examination is not performed, the response to Item 39 may be based on direct observation or history.

ITEM 40. SKIN

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
40. Skin		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A careful examination of the skin may reveal underlying systemic disorders of clinical importance. For example, thyroid disease may produce changes in the skin and fingernails. Cushing's disease may produce abdominal striae, and abnormal pigmentation of the skin occurs with Addison's disease.

Needle marks that suggest drug abuse should be noted and body marks and scars should be described and correlated with known history. Further history should be obtained as needed to explain findings.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Cutaneous			
Dermatomyositis; Deep Mycotic Infections; Eruptive Xanthomas; Hansen's Disease; Lupus Erythematosus; Raynaud's Phenomenon; Sarcoid; or Scleroderma	All	Submit all pertinent medical information and current status report	Requires FAA Decision
Kaposi's Sarcoma	All	Submit all pertinent medical information and current status report. See HIV Protocol	Requires FAA Decision
Malignant Melanoma			
Melanoma Breslow Level >.75 mm with/ without any metastasis	All	Submit all pertinent medical records, operative/ pathology reports, and current oncological status report, and current MRI of the brain	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Malignant Melanoma			
Melanoma of Unknown Primary Origin	All	Submit all pertinent medical records, operative/ pathology reports, and current oncological status report, current MRI of the brain; PET scan if no primary	Requires FAA Decision
Neurofibromatosis with Central Nervous System Involvement	All	Submit all pertinent medical information and current status medical report	Requires FAA Decision
Urticarial Eruptions			
Angioneurotic Edema	All	Submit all pertinent medical records and a current status report to include treatment	Requires FAA Decision
Chronic Urticaria	All	Submit all records and a current status report to include treatment	Requires FAA Decision

ITEM 41. G-U SYSTEM

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
41. G-U system (Not including pelvic examination)		

NOTE: The pelvic examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a pelvic examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8.

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

The Examiner should observe for discharge, inflammation, skin lesions, scars, strictures, tumors, and secondary sexual characteristics. Palpation for masses and areas of tenderness should be performed. The pelvic examination is performed only at the applicant's option or if indicated by specific history or physical findings. If a pelvic examination is performed, the results are to be recorded in Item 60 of FAA Form 8500-8. Disorders such as sterility and menstrual irregularity are not usually of importance in qualification for medical certification. Specialty evaluations may be indicated by history or by physical findings on the routine examination. A personal history of urinary symptoms is important; such as:

1. Pain or burning upon urination
2. Dribbling or Incontinence
3. Polyuria, frequency, or nocturia
4. Hematuria, pyuria, or glycosuria

Special procedures for evaluation of the G-U system should best be left to the discretion of an urologist, nephrologist, or gynecologist.

III. Aerospace Medical Disposition

(See Item 48, page 120, for details concerning diabetes and Item 57, page 145, for other information related to the examination of urine).

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
General Disorders			
Congenital lesions of the kidney	All	Submit all pertinent medical information and status report	If the applicant has an ectopic, horseshoe kidney, unilateral agenesis, hypoplastic, or dysplastic and is asymptomatic – Issue Otherwise – Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
General Disorders			
Cystostomy and Neurogenic bladder	All	Requires evaluation, report must include etiology, clinical manifestation and treatment plan	Requires FAA Decision
Renal Dialysis	All	Submit a current status report, all pertinent medical reports to include etiology, clinical manifestation, BUN, Ca, PO^4, Creatinine, electrolytes, and treatment plan	Requires FAA Decision
Renal Transplant	All	See Renal Transplant Protocol	Requires FAA Decision
Inflammatory Conditions			
Acute (Nephritis)	All	Submit all pertinent medical information and status report	If > 3 mos. ago, resolved, no sequela, or indication of reoccurrence - Issue Otherwise - Requires FAA Decision
Chronic (Nephritis)	All	Submit all pertinent medical information and status report	Requires FAA Decision
Nephrosis	All	Submit all pertinent medical information and status report	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Neoplastic Disorders				
Bladder	All	Submit a current status report, all pertinent medical reports to include staging, metastatic work up, and operative report if applicable	Requires FAA Decision	
Other Neoplastic Disorders	All	Submit a current status report, all pertinent medical reports to include staging, metastatic work up, and operative report if applicable	Requires FAA Decision	
Prostatic Carcinoma	1st & 2nd	Submit a current status report, all pertinent medical reports to include staging, PSA, metastatic workup, and operative report, if applicable, and treatment	Requires FAA Decision	
Prostatic Carcinoma	3rd	Submit a current status report, all pertinent medical reports to include staging, PSA, metastatic workup, and operative report, if applicable, and treatment	**INITIAL**	**FOLLOWUP**
			Defer	AASI
Renal	All	Submit a current status report, all pertinent medical reports, include staging, metastatic workup, & operative report if applicable	Requires FAA Decision	

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Nephritis			
Polycystic Kidney Disease	All	Submit all pertinent medical information and status report	If renal function is normal and no hypertension - Issue Otherwise - Requires FAA Decision
Pyelitis or Pyelonephritis	All	Submit all pertinent medical information and status report	If asymptomatic - Issue Otherwise - Requires FAA Decision
Pyonephrosis	All	Submit all pertinent medical information and status report	Requires FAA Decision
Urinary System			
Hydronephrosis with impaired renal function	All	Submit all pertinent medical information and status report	Requires FAA Decision
Nephrectomy (non-neoplastic)	All	Submit all pertinent medical information and status report	If the remaining kidney function and anatomy is normal, without other systemic disease, hypertension, uremia, infection of the remaining kidney - Issue Otherwise - Requires FAA Decision
Nephrocalcinosis	All	Submit all pertinent medical information and status report	If calculus is not in collecting system or renal pelvis - Issue Otherwise - Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Urinary System				
Calculus [11] Renal - Single episode	All	Submit current metabolic evaluation and status report	If there is no residual calculi and the metabolic workup is negative - Issue Otherwise - Requires FAA Decision	
Renal - Multiple episodes or Retained Stones	1st & 2nd	Submit current metabolic evaluation and status report	Requires FAA Decision	
Single and Multiple episodes or Retained Stones	3rd	Submit current metabolic evaluation and status report	**INITIAL**	**FOLLOWUP**
			Defer	AASI
Ureteral or Vesical	All	Single episode and no retained calculi, submit current metabolic evaluation and status report (Ureteral stent is acceptable if functioning without sequela)	If metabolic workup is negative and there is no sequela or retained calculi - Issue Otherwise - Requires FAA Decision	

A history of recent or significant hematuria requires further evaluation.

GENITAL/REPRODUCTIVE SYSTEM

Pregnancy under normal circumstances is not disqualifying. It is recommended that the applicant's obstetrician be made aware of all aviation activities so that the obstetrician can properly advise the applicant. The Examiner may wish to counsel applicants concerning piloting aircraft during the third trimester. The proper use of lap belt and shoulder harness warrants discussion.

[11] Complete studies to determine the possible etiology and prognosis are essential to favorable FAA consideration. Determining factors include site and location of the stones, complications such as compromise in renal function, repeated bouts of kidney infection, and need for therapy. Any underlying disease will be considered. The likelihood of sudden incapacitating symptoms is of primary concern. Report of imaging studies (KUB, IVP, or spiral CT) must be submitted in order to conclude that there are no residual or retained calculi.

Use of Oral or Repository Contraceptives or Hormonal Replacement Therapy are not disqualifying for medical certification. If the applicant is experiencing no adverse symptoms or reactions to cyclic hormones and is otherwise qualified, the Examiner may issue the desired certificate.

Gender dysphoria and gender reassignment are not disqualifying, however, a complete review of the medical history and records is indicated to determine that there is no medical, psychiatric, or psychological condition that is considered disqualifying. Medical disqualification is considered appropriate during the time of hormonal manipulation until such time where there is a stabilization of the dose administered and the physiologic response. Defer and submit a current status report and all pertinent medical reports to AMCD or RFS.

ITEMS 42-43. MUSCULOSKELETAL

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
42. Upper and lower extremities (Strength and range of motion)		
43. Spine, other musculoskeletal		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113 (b)(c), 67.213 (b)(c), and 67.313 (b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Standard examination procedures should be used to make a gross evaluation of the integrity of the applicant's musculoskeletal system. The Examiner should note:

1. Pain - neuralgia, myalgia, paresthesia, and related circulatory and neurological findings

2. Weakness - local or generalized; degree and amount of functional loss

3. Paralysis - atrophy, contractures, and related dysfunctions

4. Motion coordination, tremors, loss or restriction of joint motions, and performance degradation

5. Deformity - extent and cause

6. Amputation - level, stump healing, and phantom pain

7. Prostheses - comfort and ability to use effectively

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

ITEM 42. UPPER AND LOWER EXTREMITIES

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Upper and Lower Extremities			
Amputations	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	If applicant has a SODA issued on the basis of the amputation - Issue Otherwise - Requires FAA Decision After review of all medical data, the FAA may authorize a special medical flight test
Atrophy of any muscles that is progressive, Deformities, either congenital or acquired, or Limitation of motion of a major joint, that are sufficient to interfere with the performance of airman duties	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medication with side effects, and all pertinent medical reports	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Upper and Lower Extremities			
Neuralgia or Neuropathy, chronic or acute, particularly sciatica, if sufficient to interfere with function or is likely to become incapacitating	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision
Osteomyelitis, acute or chronic, with or without draining fistula(e)	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision
Tremors, if sufficient to interfere with the performance of airman duties[12]	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision

[12] Essential tremor is not disqualifying unless it is disabling.

For all the above conditions: If the applicant is otherwise qualified, the FAA may issue a limited certificate. This certificate will permit the applicant to proceed with flight training until ready for a MFT. At that time, at the applicant's request, the FAA (usually the AMCD) will authorize the student pilot to take a MFT in conjunction with the regular flight test. The MFT and regular private pilot flight test are conducted by an FAA inspector. This affords the student an opportunity to demonstrate the ability to control the aircraft despite the handicap. The FAA inspector prepares a written report and indicates whether there is a safety problem. A medical certificate and SODA, without the student limitation, may be provided to the inspector for issuance to the applicant, or the inspector may be required to send the report to the FAA medical officer who authorized the test.

When prostheses are used or additional control devices are installed in an aircraft to assist the amputee, those found qualified by special certification procedures will have their certificates limited to require that the devices (and, if necessary, even the specific aircraft) must always be used when exercising the privileges of the airman certificate.

Item 43. SPINE, OTHER MUSCULOSKELETAL

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Arthritis			
Osteoarthritis [13]	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	If mild and controlled with small doses of nonprescription agents - Issue If symptomatic or requires medication - Requires FAA Decision

[13] Arthritis (if it is symptomatic or requires medication, other than small doses of nonprescription anti-inflammatory agents), is disqualifying unless the applicant holds a letter from the FAA specifically authorizing the Examiner to issue the certificate when the applicant is found otherwise qualified. Although the use of many medications on a continuing basis ordinarily contraindicates the performance of pilot duties, under certain circumstances, certification is possible for an applicant who is taking aspirin, ibuprofen, naproxen, similar nonsteroidal anti-inflammatory drugs (NSAID), or COX-2 inhibitors. If the applicant presents evidence documenting that the underlying condition for which the medicine is being taken is not in itself disabling and the applicant has been on therapy (NSAID) long enough to have established that the medication is well tolerated and has not produced adverse side effects, the Examiner may issue a certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Arthritis				
Rheumatoid Arthritis and Variants	1st & 2nd	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Collagen Disease				
Acute Polymyositis; Dermatomyositis; Lupus Erythematosus; or Periarteritis Nodosa	All	Submit a current status report to include functional status, frequency and severity of episodes, organ systems effected, medications with side effects and all pertinent medical reports	Requires FAA Decision	

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Spine, other musculoskeletal			
Active disease of bones and joints	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision
Ankylosis, curvature, or other marked deformity of the spinal column sufficient to interfere with the performance of airman duties	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Spine, other musculoskeletal			
Intervertebral Disc Surgery	All	**See Footnote[14]**	**See Footnote[14]**
Musculoskeletal effects of: Cerebral Palsy, Muscular Dystrophy Myasthenia Gravis, or Myopathies	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision
Other disturbances of musculoskeletal function, acquired or congenital, sufficient to interfere with the performance of airman duties or likely to progress to that degree	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision

[14]A history of intervertebral disc surgery is not disqualifying. If the applicant is asymptomatic, has completely recovered from surgery, is taking no medication, and has suffered no neurological deficit, the Examiner should confirm these facts in a brief statement in Item 60. The Examiner may then issue any class of medical certificate, providing that the individual meets all the medical standards for that class.

The paraplegic whose paralysis is not the result of a progressive disease process is considered in much the same manner as an amputee. The Examiner should defer issuance and may advise the applicant to request further FAA consideration. The applicant may be authorized to take a MFT along with the private pilot certificate flight test. If successful, the limitation VALID FOR STUDENT PILOT PURPOSES ONLY is removed from the medical certificate, but operational limitations may be added. A statement of demonstrated ability is issued.

Other neuromuscular conditions are covered in more detail in Item 46, page 99.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Spine, other musculoskeletal			
Symptomatic herniation of intervertebral disc	All	Submit a current status report to include functional status (degree of impairment as measured by strength, range of motion, pain), medications with side effects and all pertinent medical reports	Requires FAA Decision

ITEM 44. IDENTIFYING BODY MARKS, SCARS, TATTOOS

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
44. Identifying body marks, scars, tattoos (Size and location)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b), 67.213(b), and 67.313(b)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges

II. Examination Techniques

A careful examination for surgical and other scars should be made, and those that are significant (the result of surgery or that could be useful as identifying marks) should be described. Tattoos should be recorded because they may be useful for identification.

III. Aerospace Medical Disposition

The Examiner should question the applicant about any surgical scars that have not been previously addressed, and document the findings in Item 60 of FAA Form 8500-8. Medical certificates must not be issued to applicants with medical conditions that require deferral without consulting the AMCD or RFS. Medical documentation must be submitted for any condition in order to support an issuance of a medical certificate.

Disqualifying Condition: Scar tissue that involves the loss of function, which may interfere with the safe performance of airman duties.

ITEM 45. LYMPHATICS

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
45. Lymphatics		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds -

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A careful examination of the lymphatic system may reveal underlying systemic disorders of clinical importance. Further history should be obtained as needed to explain findings.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Hodgkin's Disease – Lymphoma				
Hodgkin's Disease - Lymphoma	1st & 2nd	Submit a current status report and all pertinent medical reports. Include past and present treatment(s).	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Leukemia, Acute and Chronic				
Leukemia, Acute and Chronic – All Types	All	Submit a current status report and all pertinent medical reports	Requires FAA Decision	
Chronic Lymphocytic Leukemia	1st & 2nd	Submit a current status report and all pertinent medical reports	Requires FAA Decision	
	3rd		**INTIAL**	**FOLLOWUP**
			Defer	AASI

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Lymphatics			
Adenopathy secondary to Systemic Disease or Metastasis	All	Submit a current status report and all pertinent medical reports	Requires FAA Decision
Lymphedema	All	Submit a current status report and all pertinent medical reports. Note if there are any motion restrictions of the involved extremity	Requires FAA Decision
Lymphosarcoma	All	Submit a current status report and all pertinent medical reports. Include past and present treatment(s).	Requires FAA Decision

ITEM 46. NEUROLOGIC

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
46. NEUROLOGIC		

I. Code of Federal Regulations

All Classes: 14 CFR 67.109 (a)(b), 67.209 (a)(b), and 67.309 (a)(b)

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause;

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A neurologic evaluation should consist of a thorough review of the applicant's history prior to the neurological examination. The Examiner should specifically inquire concerning a history of weakness or paralysis, disturbance of sensation, loss of coordination, or loss of bowel or bladder control. Certain laboratory studies, such as scans and imaging procedures of the head or spine, electroencephalograms, or spinal paracentesis may suggest significant medical history. The Examiner should note conditions identified in Item 60 on the application with facts, such as dates, frequency, and severity of occurrence.

A history of simple headaches without sequela is not disqualifying. Some require only temporary disqualification during periods when the headaches are likely to occur or require treatment. Other types of headaches may preclude certification by the Examiner and require special evaluation and consideration (e.g., migraine and cluster headaches).

One or two episodes of dizziness or even fainting may not be disqualifying. For example, dizziness upon suddenly arising when ill is not a true dysfunction. Likewise, the orthostatic faint associated with moderate anemia is no threat to aviation safety as long as the individual is temporarily disqualified until the anemia is corrected.

An unexplained disturbance of consciousness is disqualifying under the medical standards. Because a disturbance of consciousness may be expected to be totally incapacitating, individuals with such histories pose a high risk to safety and must be denied or deferred by the Examiner. If the cause of the disturbance is explained and a loss of consciousness is not likely to recur, then medical certification may be possible.

The basic neurological examination consists of an examination of the 12 cranial nerves, motor strength, superficial reflexes, deep tendon reflexes, sensation, coordination, mental status, and includes the Babinski reflex and Romberg sign. The Examiner should be aware of any asymmetry in responses because this may be evidence of mild or early abnormalities. The Examiner should evaluate the visual field by direct confrontation or, preferably, by one of the perimetry procedures, especially if there is a suggestion of neurological deficiency.

III. Aerospace Medical Disposition

A history or the presence of any neurological condition or disease that potentially may incapacitate an individual should be regarded as initially disqualifying. Issuance of a medical certificate to an applicant in such cases should be denied or defer, pending further evaluation. A convalescence period following illness or injury may be advisable to permit adequate stabilization of an individual's condition and to reduce the risk of an adverse event. Applications from individuals with potentially disqualifying conditions should be forwarded to the AMCD. Processing such applications can be expedited by including hospital records, consultation reports, and appropriate laboratory and imaging studies, if available. Symptoms or disturbances that are secondary to the underlying condition and that may be acutely incapacitating include pain, weakness, vertigo or in coordination, seizures or a disturbance of consciousness, visual disturbance, or mental confusion. Chronic conditions may be incompatible with safety in aircraft operation because of long-term unpredictability, severe neurologic deficit, or psychological impairment.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Cerebrovascular Disease (including the brain stem) [15]			
Cerebral Thrombosis; Intracerebral or Subarachnoid Hemorrhage Transient Ischemic Attack (TIA);	All	Submit all pertinent medical records, current neurologic report, to include CHD Protocol, Brain MRI, Bilat Carotid US, name and dosage of medication(s) and side effects	Requires FAA Decision
Intracranial Aneurysm or Arteriovenous Malformation	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision

[15] Complete neurological evaluations supplemented with appropriate laboratory and imaging studies are required of applicants with the above conditions. Cerebral arteriography may be necessary for review in cases of subarachnoid hemorrhage.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Cerebrovascular Disease (including the brain stem)			
Intracranial Tumor[16]	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision
Pseudotumor Cerebri (benign intracranial hypertension)	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision

[16] A variety of intracranial tumors, both malignant and benign, are capable of causing incapacitation directly by neurologic deficit or indirectly through recurrent symptomatology. Potential neurologic deficits include weakness, loss of sensation, ataxia, visual deficit, or mental impairment. Recurrent symptomatology may interfere with flight performance through mechanisms such as seizure, headaches, vertigo, visual disturbances, or confusion. A history or diagnosis of an intracranial tumor necessitates a complete neurological evaluation with appropriate laboratory and imaging studies before a determination of eligibility for medical certification can be established. An applicant with a history of benign supratentorial tumors may be considered favorably for medical certification by the FAA and returned to flying status after a minimum satisfactory convalescence of 1 year.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Demyelinating Disease[17]			
Acute Optic Neuritis; Allergic Encephalomyelitis; Landry-Guillain-Barre Syndrome; Myasthenia Gravis; or Multiple Sclerosis	All	Submit all pertinent medical records, current neurologic report, to comment on involvement and persisting deficit, period of stability without symptoms, name and dosage of medication(s) and side effects	Requires FAA Decision

[17]Factors used in determining eligibility will include the medical history, neurological involvement and persisting deficit, period of stability without symptoms, type and dosage of medications used, and general health. A neurological and/or general medical consultation will be necessary in most instances.

Extrapyramidal, Hereditary, and Degenerative Diseases of the Nervous System[18]			
Dystonia Musculorum Deformans; Huntington's Disease; Parkinson's Disease; Wilson's Disease; or Gilles de la Tourette Syndrome; Alzheimer's Disease; Dementia (unspecified); or Slow viral diseases i.e., Creutzfeldt -Jakob's Disease	All	Obtain medical records and current neurological status, complete neurological evaluation with appropriate laboratory and imaging studies, as indicated May consider Neuro-psychological testing	Requires FAA Decision

[18] Extrapyramidal, Hereditary, and Degenerative Diseases of the Nervous System: Considerable variability exists in the severity of involvement, rate of progression, and treatment of the above conditions. A complete neurological evaluation with appropriate laboratory and imaging studies, including information specifically on the factors below, will be necessary for determination of eligibility for medical certification.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Headaches				
Atypical Facial Pain	All	Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects	Requires FAA Decision	
Chronic Tension or Cluster Headaches	All	Submit all pertinent medical records, current neurologic report, to include characteristics, frequency, severity, associated with neurologic phenomena, name and dosage of medication(s) and side effects	Requires FAA Decision	
Migraines	1st & 2nd	Submit all pertinent medical records, current neurologic report, to include characteristics, frequency, severity, associated with neurologic phenomena, and name and dosage of medication(s) and side effects	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Post-traumatic Headache	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision	

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Hydrocephalus and Shunts			
Hydrocephalus, secondary to a known injury or disease process; or normal pressure	All	Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects	Requires FAA Decision
Infections of the Nervous System			
Brain Abscess; Encephalitis; Meningitis; and Neurosyphilis	All	Complete neurological evaluation with appropriate laboratory and imaging studies	Requires FAA Decision
Neurologic Conditions			
A disturbance of consciousness without satisfactory medical explanation of the cause	All	Submit all pertinent medical records, current neurologic report, to include name and dosage of medication(s) and side effects	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Neurologic Conditions			
Epilepsy[19]	All	Submit all pertinent medical records, current status report, to include name and dosage of medication(s) and side effects	Requires FAA Decision
Febrile Seizure[20] (Single episode)	All	Submit all pertinent medical records and a current status report	If occurred prior to age 5, without recurrence and off medications for 3 years - Issue Otherwise – Requires FAA Decision
Transient loss of nervous system function(s) without satisfactory medical explanation of the cause; e.g., transient global amnesia	All	Submit all pertinent medical records, current status report, to include name and dosage of medication(s) and side effects	Requires FAA Decision

[19] Unexplained syncope, single seizure. An applicant who has a history of epilepsy, a disturbance of consciousness without satisfactory medical explanation of the cause, or a transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause must be denied or deferred by the Examiner.

[20] Infrequently, the FAA has granted an Authorization under the special issuance section of part 67 (14 CFR 67.401) when a seizure disorder was present in childhood but the individual has been seizure-free for a number of years. Factors that would be considered in determining eligibility in such cases would be age at onset, nature and frequency of seizures, precipitating causes, and duration of stability without medication. Followup evaluations are usually necessary to confirm continued stability of an individual's condition if an Authorization is granted under the special issuance section of part 67 (14 CFR 67.401).

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Other Conditions			
Trigeminal Neuralgia	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision
Presence of any neurological condition or disease that potentially may incapacitate an individual			
Head Trauma associated with:[21] Epidural or Subdural Hematoma; Focal Neurologic Deficit; Depressed Skull Fracture; or Unconsciousness or disorientation of more than 1 hour following injury	All	Submit all pertinent medical records, current status report, to include pre-hospital and emergency department records, operative reports, neurosurgical evaluation, name and dosage of medication(s) and side effects	Requires FAA Decision

[21] Pain, in some conditions, may be acutely incapacitating. Chronic recurring headaches or pain syndromes often require medication for relief or prophylaxis, and, in most instances, the use of such medications are disqualifying because they may interfere with a pilot's alertness and functioning. The Examiner may issue a medical certificate to an applicant with a long-standing history of headaches if mild, seldom requiring more than simple analgesics, occur infrequently, are not incapacitating, and are not associated with neurological stigmata.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Spasticity, Weakness, or Paralysis of the Extremities			
Conditions that are stable and non-progressive may be considered for medical certification	All	Submit all pertinent medical records, current neurologic report, to include etiology, degree of involvement, period of stability, appropriate laboratory and imaging studies	Requires FAA Decision
Vertigo or Disequilibrium[22]			
Alternobaric Vertigo; Hyperventilation Syndrome; Meniere's Disease and Acute Peripheral Vestibulopathy; Nonfunctioning Labyrinths; or Orthostatic Hypotension	All	Submit all pertinent medical records, current neurologic report, name and dosage of medication(s) and side effects	Requires FAA Decision

[22] Numerous conditions may affect equilibrium, resulting in acute incapacitation or varying degrees of chronic recurring spatial disorientation. Prophylactic use of medications also may cause recurring spatial disorientation and affect pilot performance. In most instances, further neurological evaluation will be required to determine eligibility for medical certification.

ITEM 47. PSYCHIATRIC

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
47. Psychiatric (Appearance, behavior, mood, communication, and memory)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.107(a)(b)(c), 67.207(a)(b)(c), and 67.307(a)(b)(c)

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which:

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section-

(i) "Substance" includes: alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by-

(A) Increased tolerance
(B) Manifestation of withdrawal symptoms;
(C) Impaired control of use; or
(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds-

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(Also see Items 18.m., n., and p., page 31).

II. Examination Techniques

The FAA does not expect the Examiner to perform a formal psychiatric examination.

However, the Examiner should form a general impression of the emotional stability and mental state of the applicant. There is a need for discretion in the Examiner/applicant relationship consonant with the FAA's aviation safety mission and the concerns of all applicants regarding disclosure to a public agency of sensitive information that may not be pertinent to aviation safety. Examiners must be sensitive to this need while, at the same time, collect what is necessary for a certification decision. When a question arises, the Federal Air Surgeon encourages Examiners first to check this *Guide for Aviation Medical Examiners* and other FAA informational documents. If the question remains unresolved, the Examiner should seek advice from a RFS or the Manager of the AMCD.

Review of the applicant's history as provided on the application form may alert the Examiner to gather further important factual information. Information about the applicant may be found in items related to age, pilot time, and class of certificate for which applied. Information about the present occupation and employer also may be helpful. If any psychotropic drugs are or have been used, followup questions are appropriate. Previous medical denials or aircraft accidents may be related to psychiatric problems.

Psychiatric information can be derived from the individual items in medical history (Item 18; page 31). Any affirmative answers to Item 18.m., " Mental disorders of any sort; depression, anxiety, etc.," or Item 18.p., "Suicide attempt," are significant. Any disclosure of current or previous alcohol or drug problems requires further clarification. A record of traffic violations may reflect certain personality problems or indicate an alcohol problem. Affirmative answers related to rejection by military service or a military medical discharge require elaboration. Reporting symptoms such as headaches or dizziness, or even heart or stomach trouble, may reflect a history of anxiety rather than a primary medical problem in these areas. Sometimes, the information applicants give about their previous diagnoses is incorrect, either because the applicant is unsure of the correct information or because the applicant chooses to minimize past difficulties. If there was a hospital admission for any emotionally related problem, it will be necessary to obtain the entire record.

Valuable information can be derived from the casual conversation that occurs during the physical examination. Some of this conversation will reveal information about the family, the job, and special interests. Even some personal troubles may be revealed at this time. The Examiner's questions should not be stilted or follow a regular pattern; instead, they should be a natural extension of the Examiner's curiosity about the person being examined. Information about the motivation for medical certification and interest in flying may be revealing. A formal Mental Status Examination is unnecessary. For example, it is not necessary to ask about time, place, or person to discover whether the applicant is oriented. Information about the flow of associations, mood, and memory, is generally available from the usual interactions during the examination. Indication of cognitive problems may become apparent during the examination. Such problems with concentration, attention, or confusion during the examination or slower, vague responses should be noted and may be cause for deferral.

The Examiner should make observations about the following specific elements and should note on the form any gross or notable deviations from normal:

1. Appearance (abnormal if dirty, disheveled, odoriferous, or unkempt);

2. Behavior (abnormal if uncooperative, bizarre, or inexplicable);

3. Mood (abnormal if excessively angry, sad, euphoric, or labile);

4. Communication (abnormal if incomprehensible, does not answer questions directly);

5. Memory (abnormal if unable to recall recent events); and

6. Cognition (abnormal if unable to engage in abstract thought, or if delusional or hallucinating).

The Examiner, upon identifying any significant problems, should defer issuance of the medical certificate and report findings to the FAA. This could be accomplished by contacting a RFS or the Manager of the AMCD.

III. Aerospace Medical Disposition

A. General Considerations. It must be pointed out that considerations for safety, which in the "mental" area are related to a compromise of judgment and emotional control or to diminished mental capacity with loss of behavioral control, are not the same as concerns for emotional health in everyday life. Some problems may have only a slight impact on an individual's overall capacities and the quality of life but may nevertheless have a great impact on safety. Conversely, many emotional problems that are of therapeutic and clinical concern have no impact on safety.

B. Denials. The FAA has concluded that certain psychiatric conditions are such that their presence or a past history of their presence is sufficient to suggest a significant potential threat to safety. It is, therefore, incumbent upon the Examiner to be aware of any indications of these conditions currently, or in the past, and to deny or defer issuance of the medical certificate to an applicant who has a history of these conditions. An applicant who has a current diagnosis or history of these conditions (listed below) may request the FAA to grant an Authorization under the special issuance section of part 67 (14 CFR 67.401) and, based upon individual considerations, the FAA may grant such an issuance.

NOTE: The use of a psychotropic drug is disqualifying for aeromedical certification purposes. This includes all sedatives, tranquilizers, antipsychotic drugs, antidepressant drugs (including SSRI's), analeptics, anxiolytics, and hallucinogens. The Examiner

should defer issuance and forward the medical records to the AMCD.

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSTION
Psychiatric Conditions			
Adjustment Disorders	All	Submit all pertinent medical information and clinical status report	If stable, resolved, no associated disturbance of thought, no recurrent episodes, and psychotropic medication(s) used for less than 6 months and discontinued for at least 3 months - Issue Otherwise - Requires FAA Decision
Bipolar Disorder	All	See III. B-3 below	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSTION
Psychiatric Conditions			
Bereavement; Dysthmic; or Minor Depression	All	Submit all pertinent medical information and clinical status report	If stable, resolved, no associated disturbance of thought, no recurrent episodes, and; a). psychotropic medication(s) used for less than 6 months and discontinued for at least 3 months – Issue b). No use of psychotropic medication(s) - Issue Otherwise - Requires FAA Decision
Personality Disorder	All	See III. B-1 and 4 below	Requires FAA Decision
Psychosis	All	See III. B-2 below	Requires FAA Decision
Pyschotropic medications for Smoking Cessation	All	Document period of use, name and dosage of medication(s) and side-effects	If medication(s) discontinued for at least 30 days and w/o side-effects - Issue Otherwise – Requires FAA Decision
Substance Abuse	All	See III. B-6 below	Requires FAA Decision
Substance Dependence	All	See III.B-5 below	Requires FAA Decision
Suicide Attempt	All	Submit all pertinent medical information required	Requires FAA Decision

1. The category of personality disorders severe enough to have repeatedly manifested itself by overt acts refers to diagnosed personality disorders that involve what is called "acting out" behavior. These personality problems relate to poor social judgment, impulsivity, and disregard or antagonism toward authority, especially rules and regulations. A history of long-standing behavioral problems, whether major (criminal) or relatively minor (truancy, military misbehavior, petty criminal and civil indiscretions, and social instability), usually occurs with these disorders.

Driving infractions and previous failures to follow aviation regulations are critical examples of these acts.

Certain personality disorders and other mental disorders that include conditions of limited duration and/or widely varying severity may be disqualifying. Under this category, the FAA is especially concerned with significant depressive episodes requiring treatment, even outpatient therapy. If these episodes have been severe enough to cause some disruption of vocational or educational activity, or if they have required medication or involved suicidal ideation, the application should be deferred or denied issuance.

Some personality disorders and situational dysphorias may be considered disqualifying for a limited time. These include such conditions as gross immaturity and some personality disorders not involving or manifested by overt acts.

2. The category of psychosis includes schizophrenia and some bipolar and major depression, as well as some other rarer conditions. In addition, some conditions such as schizotypal and borderline personality disorders that include psychotic symptoms at some time in their course may also be disqualifying.

3. A bipolar disorder may not reach the level of psychosis but can be so disruptive of judgment and functioning (especially mania) so as to interfere with aviation safety. All applicants with such a diagnosis must be denied or deferred. However, a number of these applicants, so diagnosed, may be favorably considered for an Authorization when the symptoms do not constitute a threat to safe aviation operations.

4. Although they may be rare in occurrence, severe anxiety problems, especially anxiety and phobias associated with some aspect of flying, are considered significant. Organic mental disorders that cause a cognitive defect, even if the applicant is not psychotic, are considered disqualifying whether they are due to trauma, toxic exposure, or arteriosclerotic or other degenerative changes.

(See Item 18.m., page 31).

5. Substance dependence refers to the use of substances of dependence, which include alcohol and other drugs (i.e., PCP, sedatives and hypnotics, anxiolytics, marijuana, cocaine, opioids, amphetamines, hallucinogens, and other psychoactive drugs or chemicals). Substance dependence is defined and specified as a disqualifying medical condition. It is disqualifying unless there is clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance for not less than the preceding 2 years.

Substance dependence is evidenced by one or more of the following: increased tolerance, manifestation of withdrawal symptoms, impaired control of use, or continued use despite damage to physical health or impairment of social, personal, or occupational functioning. Substance dependence is accompanied by various deleterious effects on physical health as well as personal or social functioning. There are many other indicators of substance dependence in the history and physical examination. Treatment for substance dependence-related problems, arrests, including charges of driving under the influence of drugs or alcohol, and vocational or marital disruption related to drugs or alcohol consumption are important indicators. Alcohol on the breath at the time of a routine physical examination should arouse a high index of suspicion. Consumption of drugs or alcohol sufficient to cause liver damage is an indication of the presence of alcoholism.

6. Substance abuse includes the use of the above substances under any one of the following conditions:

a. Use of a substance in the last 2 years in which the use was physically hazardous (e.g., DUI or DWI) if there has been at any other time an instance of the use of a substance also in a situation in which the use was physically hazardous;

b. If a person has received a verified positive drug test result under an anti-drug program of the Department of Transportation or one of its administrations; or

c. The Federal Air Surgeon finds that an applicant's misuse of a substance makes him or her unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held, or that may reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the applicant unable to perform those duties or exercise those privileges.

Substance dependence and substance abuse are specified as disqualifying medical conditions.

ITEM 48. GENERAL SYSTEMIC

CHECK EACH ITEM IN APPROPRIATE COLUMN	NORMAL	ABNORMAL
48. General Systemic		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a)(b)(c), 67.213(a)(b)(c), and 67.313(a)(b)(c)

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds-

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

A protocol for examinations applicable to Item 48 (see page 120), is not provided because the necessary history-taking, observation, and other examination techniques used in examining other systems have already revealed much of what can be known about the status of the applicant's endocrine and other systems. For example, the examination of the skin alone can reveal important signs of thyroid dysfunction, Addison's disease, Cushing's disease, and several other endocrine disorders. The eye may reflect a thyroid disorder (exophthalmos) or diabetes (retinopathy).

When the Examiner reaches Item 48 (see page 120), in the course of the examination of an applicant, it is recommended that the Examiner take a moment to review and determine if key procedures have been performed in conjunction with examinations

made under other items, and to determine the relevance of any positive or abnormal findings.

III. Aerospace Medical Disposition

The following is a table that lists the most common conditions of aeromedical significance, and course of action that should be taken by the examiner as defined by the protocol and disposition in the table. Medical certificates must not be issued to an applicant with medical conditions that require deferral, or for any condition not listed in the table that may result in sudden or subtle incapacitation without consulting the AMCD or the RFS. Medical documentation must be submitted for any condition in order to support an issuance of an airman medical certificate.

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Blood and Blood-Forming Tissue Disease			
Anemia	All	Submit a current status report and all pertinent medical reports. Include a CBC, and any other tests deemed necessary	Requires FAA Decision
Hemophilia	All	Submit a current status report and all pertinent medical reports. Include frequency, severity and location of bleeding sites	Requires FAA Decision
Other disease of the blood or blood-forming tissues that could adversely affect performance of airman duties	All	Submit a current status report and all pertinent medical reports	Requires FAA Decision
Polycythemia	All	Submit a current status report and all pertinent medical reports; include CBC	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Diabetes				
Diabetes Insipidus	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Requires FAA Decision	
Diabetes Mellitus Diet Controlled	All	See Diabetes Mellitus Controlled by Diet and Exercise Protocol	If no glycosuria and normal Hgba1c - Issue	
Diabetes Mellitus I requiring Insulin	1st & 2nd	Not currently granting Special Issuance	Requires FAA Decision	
	3rd	See Diabetes Mellitus I Protocol	Requires FAA Decision	
Diabetes Mellitus II requiring Oral Medication	1st & 2nd	See Diabetes Mellitus II Protocol	Requires FAA Decision	
	3rd	See Diabetes Mellitus II Protocol	**INITIAL**	**FOLLOWUP**
			Defer	AASI
Endocrine Disorders				
Acromegaly	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Requires FAA Decision	
Addison's Disease	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Requires FAA Decision	

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION
Endocrine Disorders			
Cushing's Disease or Syndrome	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Requires FAA Decision
Hypoglycemia, whether functional or a result of pancreatic tumor	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Requires FAA Decision
Hyperparathyroidism	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects, and current serum calcium and phosphorus levels	If status post-surgery, disease controlled, stable and no sequela - Issue Otherwise - Requires FAA Decision
Hypoparathyroidism	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects and current serum calcium and phosphorus levels	Requires FAA Decision

DISEASE/CONDITION	CLASS	EVALUATION DATA	DISPOSITION	
Endocrine Disorders				
Hyperthyroidism	1st & 2nd	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects and current TFTs	Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Hypothyroidism[23]	1st & 2nd	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects and current TFTs	If euthyroid - Issue Otherwise - Requires FAA Decision	
	3rd		**INITIAL**	**FOLLOWUP**
			Defer	AASI
Proteinuria & Glycosuria	All	Submit all pertinent medical records; current status to include names and dosage of medication(s) and side effects	Trace or 1+ protein and glucose intolerance ruled out - Issue Otherwise - Requires FAA Decision	
Human Immunodeficiency Virus (HIV)				
Acquired Immunodeficiency Syndrome (AIDS)	All	See HIV Protocol	Requires FAA Decision	
Human Immunodeficiency Virus (HIV)	All	See HIV Protocol	Requires FAA Decision	

[23] The use of thyroid replacement therapy following diagnosis of either hyperthyroidism or hypothyroidism is not disqualifying if the applicant appears clinically euthyroid pending receipt of confirmatory laboratory tests.

<table>
<tr><th>DISEASE/CONDITION</th><th>CLASS</th><th>EVALUATION DATA</th><th colspan="2">DISPOSITION</th></tr>
<tr><td colspan="5">Leukemia, Acute and Chronic – All Types
(except Chronic Lymphocytic Leukemia for Third-Class)</td></tr>
<tr><td rowspan="3">Leukemia, Acute and Chronic - All Types (except Chronic Lymphocytic Leukemia for Third-Class)</td><td>1st & 2nd</td><td rowspan="3">Submit a current status report and all pertinent medical reports</td><td colspan="2">Requires FAA Decision</td></tr>
<tr><td rowspan="2">3rd</td><td>INTIAL</td><td>FOLLOWUP</td></tr>
<tr><td>Defer</td><td>AASI</td></tr>
</table>

CHAPTER 4

EXAMINATION TECHNIQUES AND CRITERIA FOR QUALIFICATION

ITEMS 49-64 of FAA Form 8500-8

This chapter provides guidance for the completion of Items 49-64 of FAA Form 8500-8. The Examiner is responsible for conducting the examination. However, he or she may delegate to a qualified physician's assistant, nurse, aide, or laboratory assistant the testing required for Items 49-58. Regardless of who performs the tests, the Examiner is responsible for the accuracy of the findings, and this responsibility **may not** be delegated.

After all routine evaluations and tests are completed, the Examiner should make a complete review of FAA Form 8500-8. If the form is complete and accurate, the Examiner should add final comments, make qualification decision statements, and sign the declaration. The medical history page of FAA Form 8500-8 must be completed in the handwriting of and signed and dated by the applicant. Upon completion of the physical examination, the entire FAA Form 8500-8, Items 1 through 64, **must** be electronically transmitted to the FAA.

ITEM 49. HEARING

49. Hearing	Record Audiometric Speech Discrimination Score Below
Conversational Voice Test at 6 Feet ☐ Pass ☐ Fail	

I. Code of Federal Regulations

All Classes: 14 CFR 67.105(a)(b)(c), 67.205(a)(b)(c), and 67.305(a)(b)(c)

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42nd Street, New York, NY 10036):

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that-

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

II. Examination Equipment and Techniques

A. Order of Examinations

1. The applicant must demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the Examiner, with the back turned to the Examiner.

2. If an applicant fails the conversational voice test, the Examiner may administer pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

If the applicant fails an audiometric test and the conversational voice test had not been administered, the conversational voice test should be performed to determine if the standard applicable to that test can be met.

3. If an applicant is unable to pass either the conversational voice test or the pure tone audiometric test, then an audiometric speech discrimination test should be

administered. A passing score is at least 70 percent obtained in one ear at an intensity of no greater than 65 Db.

B. Discussion

1. Conversational voice test. For all classes of certification, the applicant must demonstrate hearing of an average conversational voice in a quiet room, using both ears, at 6 feet, with the back turned to the Examiner. The Examiner should not use only sibilants (S-sounding test materials). If the applicant is able to repeat correctly the test numbers or words, "pass" should be noted and recorded on FAA Form 8500-8, Item 49. If the applicant is unable to hear a normal conversational voice then "fail" should be marked and one of the following tests may be administered:

2. Standard. For all classes of certification, the applicant may be examined by pure tone audiometry as an alternative to conversational voice testing or upon failing the conversational voice test. If the applicant fails the pure tone audiometric test and has not been tested by conversational voice, that test may be administered. The requirements expressed as audiometric standards according to a table of acceptable thresholds (American National Standards Institute [ANSI], 1969, calibration) are as follows:

EAR(All classes of medical certification)				
Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

3. Audiometric Speech Discrimination. Upon failing both conversational voice and pure tone audiometric test, an audiometric speech discrimination test should be administered (usually by an otologist or audiologist). The applicant must score at least 70 percent at an intensity no greater than 65 Db in either ear.

C. Equipment

1. Approval. The FAA does not approve or designate specific audiometric equipment for use in medical certification. Equipment used for FAA testing must accurately and reliably cover the required frequencies and have adequate threshold step features. Because every audiometer manufactured in the United States for screening and diagnostic purposes is built to meet appropriate standards, most audiometers should be acceptable *if they are maintained in proper calibration* and are used in an adequately quiet place.

2. Calibration. It is critical that any audiometer be periodically calibrated to ensure its continued accuracy. Annual calibration is recommended. Also recommended is the further safeguard of obtaining an occasional audiogram on a "known" subject or staff member between calibrations, especially at any time that a test result unexpectedly varies significantly from the hearing levels clinically expected. This

testing provides an approximate "at threshold" calibration. The Examiner should ensure that the audiometer is calibrated to ANSI standards or if calibrated to the older ASA/USASI standards, the appropriate correction is applied (see paragraph 3 below).

3. ASA/ANSI. Older audiometers were often calibrated to meet the standards specified by the USA Standards Institute (USASI), formerly the American Standards Association (ASA). These standards were based upon a U.S. Public Health Service survey. Newer audiometers are calibrated so that the zero hearing threshold level is now based on laboratory measurements rather than on the survey. In 1969, the American National Standards Institute (ANSI) incorporated these new measurements. Audiometers built to this standard have instruments or dials that read in ANSI values. For these reasons, *it is very important that every audiogram submitted (for values reported in Item 49 on FAA Form 8500-8) include a note indicating whether it is ASA or ANSI.* Only then can the FAA standards be appropriately applied. ASA or USASI values can be converted to ANSI by adding corrections as follows:

Frequency (Hz)	500 Hz	1,000 Hz	2,000 Hz	3,000 Hz
Decibels Added*	14	10	8.5	8.5

*The decibels added figure is the amount added to ASA or USASI at each specific frequency to convert to ANSI or older equivalent ISO values.

III. Aerospace Medical Disposition

1. Special Issuance of Medical Certificates. Applicants who do not meet the auditory standards may be found eligible for a Statement of Demonstrated Ability (SODA). An applicant seeking a SODA must make the request in writing to the Aerospace Medicine Certification Division, AAM-300. A determination of qualifications will be made on the basis of a special medical examination by an ENT consultant, a MFT, or operational experience.

2. Bilateral Deafness. If otherwise qualified, the AMCD may issue a combination medical/student pilot certificate with the limitation VALID FOR STUDENT PILOT PURPOSES ONLY as well as the limitation NOT VALID FOR CONTROL ZONES OR AREAS WHERE RADIO COMMUNICATION IS REQUIRED. This will enable the applicant to proceed with training to the point of a private pilot checkride. See Items 25-30, page 38.

When the student pilot's instructor confirms the student's eligibility for a private pilot checkride, the applicant should submit a written request to the AMCD, for an authorization for a MFT. This test will be given by an FAA inspector in conjunction with the checkride. If the applicant successfully completes the test, the FAA will issue a third-class medical certificate and SODA. Pilot activities will be restricted to areas in which radio communication is not required.

3. Hearing Aids. If the applicant meets the standard with the use of hearing aids, the certificate may be issued with the following restriction:

VALID ONLY WITH USE OF HEARING AMPLIFICATION

Some pilots who normally wear hearing aids to assist in communicating while on the ground report that they elect not to wear them while flying. They prefer to use the volume amplification of the radio headphone. Some use the headphone on one ear for radio communication and the hearing aid in the other for cockpit communications.

ITEMS 50- 54. OPHTHALMOLOGIC DISORDER

ITEM 50. DISTANT VISION

50. Distant Vision		
Right	20/	Corrected to 20/
Left	20/	Corrected to 20/
Both	20/	Corrected to 20/

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(a) and 67.203(a)

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate

Third-Class: 14 CFR 67.303(a)

(a) Distant visual acuity of 20/40 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/40 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

II. Examination Equipment and Techniques

1. Each eye will be tested separately, and both eyes together.

2. Snellen 20-foot eye chart may be used as follows:

a. The Snellen chart should be illuminated by a 100-watt incandescent lamp placed 4 feet in front of and slightly above the chart.

b. The chart or screen should be placed 20 feet from the applicant's eyes and the 20/20 line should be placed 5 feet 4 inches above the floor.

c. A metal, opaque plastic, or cardboard occluder should be used to cover the eye not being examined.

d. The examining room should be darkened with the exception of the illuminated chart or screen.

e. If the applicant wears corrective lenses, the uncorrected acuity should be determined first, then corrected acuity. If the applicant wears contact lenses, see the recommendations in paragraph III.F., of this item.

f. Common errors:

1. Failure to shield the applicant's eyes from extraneous light.
2. Permitting the applicant to view the chart with both eyes.
3. Failure to observe the applicant's face to detect squinting.
4. Incorrect sizing of projected chart letters for a 20-foot distance.
5. Failure to focus the projector sharply.
6. Failure to obtain the corrected acuity when the applicant wears glasses.
7. Failure to note and to require the removal of contact lenses.

3. Directions furnished by the manufacturer or distributor should be followed when using substitute devices for the above testing.

Acceptable Substitutes for Distant Vision Testing: Projector with screen; Keystone Orthoscope; Bausch & Lomb Orthorator; AOC Site-Screener; Titmus Vision Tester; Keystone Telebinocular; OPTEC 2000 Vision Tester.

III. Aerospace Medical Disposition

A. When corrective lenses are required to meet the standards, an appropriate limitation will be placed on the medical certificate. For example, when lenses are needed for distant vision only:

> HOLDER SHALL WEAR CORRECTIVE LENSES

For multiple vision defects involving distant and/or intermediate and/or near vision when one set of monofocal lenses corrects for all, the limitation is:

> HOLDER SHALL WEAR CORRECTIVE LENSES

For combined defective distant and near visual acuity where multifocal lenses are required, the appropriate limitation is:

> HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION AND POSSESS GLASSES THAT CORRECT FOR NEAR VISION

For multiple vision defects involving distant, near, and intermediate visual acuity when more than one set of lenses is required to correct for all vision defects, the appropriate limitation is:

> HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION AND POSSESS GLASSES THAT CORRECT FOR NEAR AND INTERMEDIATE VISION

(For limitations as they appear on medical certificates, see Appendix B).

B. An applicant who fails to meet vision standards and has no SODA that covers the extent of the visual acuity defect found on examination may obtain further FAA consideration for grant of an Authorization under the special issuance section of part 67 (14 CFR 67.401) for medical certification by submitting a report of an eye evaluation. The Examiner can help to expedite the review procedure by forwarding a copy of FAA Form 8500-7, Report of Eye Evaluation, that has been completed by an eye specialist[24].

C. Applicants who do not meet the visual standards should be referred to a specialist for evaluation. Applicants with visual acuity or ocular muscle balance problems may be referred to either an optometrist or an ophthalmologist of the applicant's choice. Applicants with eye disease (e.g., glaucoma) should be referred only to an ophthalmologist. The FAA Form 8500-7, Report of Eye Evaluation, should be provided to the specialist by the Examiner.

D. Amblyopia. In amblyopia ex anopsia, the visual acuity of one eye is decreased without presence of organic eye disease, usually because of strabismus or anisometropia in childhood. In amblyopia ex anopsia, the visual acuity loss is simply recorded in Item 50 of FAA form 8500-8, and visual standards are applied as usual. If the standards are not met, a report of eye evaluation, FAA Form 8500-7, should be submitted for consideration.

E. Monovision. See AASI for History of Monocularity

Item 51.a. NEAR VISION

51.a. Near Vision		
Right	20/	Corrected to 20/
Left	20/	Corrected to 20/
Both	20/	Corrected to 20/

[24] In obtaining special eye evaluations in respect to the airman medical certification program or the air traffic controller health program, reports from either optometrists or ophthalmologists are acceptable when the condition being evaluated relates to a determination of visual acuity, refractive error, or mechanical function of the eye. FAA Form 8500-7, Report of Eye Evaluation, is a form that is designed for use by either optometrists or ophthalmologists. In those cases where individuals are being referred for treatment or diagnosis of a disease of the eye, evaluations should usually be conducted by ophthalmologists. Board certification is not considered essential.

Therefore, except under unusual circumstances, you should make no distinction between optometrists or ophthalmologists as a source of information regarding visual acuity, refractive error, or mechanical function of the eye when referring applicants or employees for eye evaluations. You may, however, specify that only reports from ophthalmologists will be accepted when referring an individual for treatment or diagnosis of eye disease.

Any applicant eligible for a medical certificate through special issuance under these guidelines shall pass a MFT, which may be arranged through the appropriate agency medical authority. While waiting to complete a MFT, an applicant who is otherwise qualified for certification may be issued a medical certificate, which must contain the limitation “Valid for Student Pilot Privileges Only.”

ITEM 51.b. INTERMEDIATE VISION

51.b. Intermediate Vision – 32 Inches		
Right	20/	Corrected to 20/
Left	20/	Corrected to 20/
Both	20/	Corrected to 20/

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(b) and 67.203(b)

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

Third-Class: 14 CFR 67.303(b)

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.

II. Equipment and Examination Techniques

NEAR AT 16 INCHES	INTERMEDIATE AT 32 INCHES
Near Vision Acuity Test Chart Dated April 1993 FAA Form 8500-1	Near Vision Acuity Test Chart Dated April 1993 FAA Form 8500-1
Acceptable substitutes: AOC Site-Screener Bausch & Lomb Orthorator Keystone Orthoscope Keystone Telebinocular OPTEC 2000 Vision Tester Titmus Vision Tester	Acceptable substitutes: OPEC 2000 Vision Tester Titmus Vision Tester Titmus II Vision Tester (Model Nos. TII and TIIS) Titmus 2 Vision Tester (Model Nos. T2A and T2S) Others as approved

1. Near visual acuity and intermediate visual acuity, if the latter is required, are determined for each eye separately and for both eyes together. Test values are recorded both with and without corrective glasses/lenses when either are worn or required to meet the standards. If the applicant is unable to meet the

intermediate acuity standard unaided, he or she then is tested using each of the corrective lenses or glasses otherwise needed by that person to meet distant and/or near visual acuity standards. If the aided acuity meets the standard using any of the lenses or glasses, the findings are recorded, and the certificate appropriately limited (see Appendix B). If an applicant has no lenses that bring intermediate and/or near visual acuity to the required standards, or better, in each eye, no certificate may be issued, and the applicant is referred to an eye specialist for appropriate visual evaluation and correction..

2. FAA Form 8500-1, Near Vision Acuity Test Chart, dated April 1993, should be used as follows:

a. The examination is conducted in a well-lighted room with the source of light behind the applicant.

b. The applicant holds the chart 16 inches (near) and 32 inches (intermediate) from the eyes in a position that will provide uniform illumination. To ensure that the chart is held at exactly 16 inches or 32 inches from the eyes, a string of that length may be attached to the chart.

c. Each eye is tested separately, with the other eye covered. Both eyes are then tested together.

d. The smallest type correctly read with each eye separately and both eyes together is recorded in linear value. In performing the test using FAA Form 8500-1, the level of visual acuity will be recorded as the line of smallest type the applicant reads accurately. The applicant should be allowed no more than two misread letters on any line.

e. Common errors:

1. Inadequate illumination of the test chart.
2. Failure to hold the chart the specified distance from the eye.
3. Failure to ensure that the untested eye is covered.
4. Failure to determine uncorrected and corrected acuity when the applicant wears glasses.

f. Practical Test. At the bottom of FAA Form 8500-1 is a section for Aeronautical Chart Reading. Letter types and charts are reproduced from aeronautical charts in their actual size.

This may be used when a borderline condition exists at the certifiable limits of an applicant's vision. If successfully completed, a favorable certification action may be taken.

3. Acceptable substitute instruments may be used, following the directions accompanying the instruments.

III. Aerospace Medical Disposition

When correcting glasses are required to meet the near and intermediate vision standards, an appropriate limitation will be placed on the medical certificate. Contact lenses that correct only for near or intermediate visual acuity are not considered acceptable for aviation duties.

If the applicant meets the uncorrected near or intermediate vision standard of 20/40, but already uses spectacles that correct the vision better than 20/40, it is recommended that the Examiner enter the limitation for near or intermediate vision corrective glasses on the certificate.

For all classes, the appropriate wording for the near vision limitation is:

HOLDER SHALL POSSESS GLASSES THAT
CORRECT FOR NEAR VISION

Possession only is required, because it may be hazardous to have distant vision obscured by the continuous wearing of reading glasses.

For first- and second-class, the appropriate wording for combined near and intermediate vision limitation is:

HOLDER SHALL POSSESS GLASSES THAT CORRECT
FOR NEAR AND INTERMEDIATE VISION

For multiple defective distant, near, and intermediate visual acuity when unifocal glasses or contact lenses are used and correct all, the appropriate limitation is:

HOLDER SHALL WEAR CORRECTIVE LENSES

For multiple vision defects involving distance and/or near and/or intermediate visual acuity when more than one set of lenses is required to correct for all vision defects, the appropriate limitation is:

HOLDER SHALL WEAR LENSES THAT CORRECT FOR DISTANT VISION
AND POSSESS GLASSES THAT CORRECT FOR
NEAR AND INTERMEDIATE VISION

ITEM 52. COLOR VISION

52. Color Vision	
☐	**Pass**
☐	**Fail**

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(c) and 67.203(c)

(c) Color vision: Ability to perceive those colors necessary for the safe performance of airman duties.

Third-Class: 14 CFR 67.303(c)

(c) Color vision: Ability to perceive those colors necessary for the safe performance of airman duties.

II. Examination Equipment and Techniques

EQUIPMENT	TEST	EDITION	PLATES
Pseudoisochromatic plates	Test book should be held 30'' from applicant Plates should be illuminated by at least 20' candles, preferably by a Macbeth Easel Lamp or a Verilux True Color Light (F15T8VLX) Only three seconds are allowed for the applicant to interpret and respond to a given plate		
American Optical Company [AOC]		1965	1-15
AOC-HRR		2nd	1-11
Dvorine		2nd	1-15
Ishihara		14 Plate	1-11
		24 Plate	1-15
		38 Plate	1-21
Richmond, 15-plates		1983	1-15

Acceptable Substitutes: The procedures for the Farnsworth Lantern or OPTEC 900 Color Vision Test; Keystone Orthoscope; Keystone Telebinocular; LKC Technologies, Inc., APT-5 Color Vision Tester; OPTEC 2000 Vision Tester (Model Nos. 2000PM, 2000PAME, and 2000PI); Titmus Vision Tester; Titmus II Vision Tester (Model Nos. TII and TIIS); and the Titmus 2 Vision Tester (Model Nos. T2A and T2S) accompany the instructions.

III. Aerospace Medical Disposition

An applicant does not meet the color vision standard if testing reveals:

A. All Classes

1. Seven or more errors on plates 1-15 of the AOC (1965 edition) pseudoisochromatic plates.

2. AOC-HRR (second edition): Any error in test plates 7-11. Because the first 4 plates in the test book are for demonstration only, test plate 7 is actually the eleventh plate in the book. (See instruction booklet.)

3. Seven or more errors on plates 1-15 of Dvorine pseudoisochromatic plates (second edition, 15 plates.)

4. Six or more errors on plates 1-11 of the concise 14-plate edition of the Ishihara pseudoisochromatic plates. Seven or more errors on plates 1-15 of the 24-plate edition of Ishihara pseudoisochromatic plates. Nine or more errors on plates 1-21 of the 38-plate edition of Ishihara pseudoisochromatic plates.

5. Seven or more errors on plates 1-15 of the Richmond (1983 edition) pseudoisochromatic plates.

6. Farnsworth Lantern test: An average of more than one error per series of nine color pairs in series 2 and 3. (See instruction booklet.)

7. Any errors in the six plates of the Titmus Vision Tester, the Titmus II Vision Tester, the Titmus 2 Vision Tester, the OPTEC 2000 Vision Tester, the OPTEC 900 Vision Tester the Keystone Orthoscope, or Keystone Telebinocular.

8. LKC Technologies, Inc., APT-5 Color Vision Tester. The letter must be correctly identified in at least two of the three presentations of each test condition. (See APT-5 screening chart for FAA-related testing in instruction booklet.)

B. Certificate Limitation.

If an applicant fails to meet the color vision standard as interpreted above but is otherwise qualified, the Examiner may issue a medical certificate bearing the limitation:

NOT VALID FOR NIGHT FLYING OR BY COLOR SIGNAL CONTROL

C. Special Issuance of Medical Certificates.

An applicant who holds a medical certificate bearing a color vision limitation may request a signal light test. This request should be in writing and should be directed to the AMCD or RFS. If the applicant passes the signal light test, the FAA will issue a medical certificate without the color vision limitation and provide the applicant with a "letter of evidence." The signal light test may be given at any time during flight training.

D. "Color Vision Correcting" Lens (e.g. X-Chrom). Such lens are unacceptable to the FAA as a means for correcting a pilot's color vision deficiencies.

E. Yarn Test. Yarn tests are not acceptable methods of testing for the FAA medical certificate.

ITEM 53. FIELD OF VISION

53. Field of Vision	
☐ **Normal**	☐ Abnormal

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(d) and 67.203(d)

(d) Field of Vision: Normal

Third-Class: 14 CFR 67.303(d)

(d) Field of Vision: No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

II. Examination Equipment and Techniques

1. Fifty-inch square black matte surface wall target with center white fixation point; 2 millimeter white test object on black-handled holder:

a. The applicant should be seated 40 inches from the target.

b. An occluder should be placed over the applicant's right eye.

c. The applicant should be instructed to keep the left eye focused on the fixation point.

d. The white test object should be moved from the outside border of the wall target toward the point of fixation on each of the eight 4-degree radials.

e. The result should be recorded on a worksheet as the number of inches from the fixation point at which the applicant first identifies the white target on each radial.

f. The test should be repeated with the applicant's left eye occluded and the right eye focusing on the fixation point.

2. Alternative Techniques:

a. A standard perimeter may be used in place of the above procedure. With this method, any significant deviation from normal field configuration will require evaluation by an ophthalmologist.

b. Direct confrontation. This is the least acceptable alternative since this tests for peripheral vision and only grossly for field size and visual defects. The Examiner, standing in front of the applicant, has the applicant look at the Examiner's nose while advancing two moving fingers from slightly behind and to the side of the applicant in each of the four quadrants. Any significant deviation from normal requires ophthalmological evaluation.

III. Aerospace Medical Disposition

A. Ophthalmological Consultations.

If an applicant fails to identify the target in any presentation at a distance of less than 23 inches from the fixation point, an ophthalmologist's evaluation must be requested. This is a requirement for all classes of certification. The Examiner should provide FAA Form 8500-14, Ophthalmological Evaluation for Glaucoma, for use by the ophthalmologist if glaucoma is suspected.

B. Glaucoma.

The FAA may grant an Authorization under the special issuance section of part 67 (14 CFR 67.401) on an individual basis. The Examiner can facilitate FAA review by obtaining a report of Ophthalmological Evaluation for Glaucoma (FAA Form 8500-14) from a treating or evaluating ophthalmologist. (See Item 31).

NOTE: See AASI for History of Glaucoma.

If considerable disturbance in night vision is documented, the FAA may limit the medical certificate: NOT VALID FOR NIGHT FLYING

C. Other Pathological Conditions.

See Items 31-34, beginning on page 45.

ITEM 54. HETEROPHORIA

54. Heterophoria 20' (in prism diopters)	Esophoria	Exophoria	Right Hyperphoria	Left Hyperphoria

I. Code of Federal Regulations

First- and Second-Classes: 14 CFR 67.103(f) and 67.203(f)

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

Third-Class: No Standards

II. Examination Equipment and Techniques

A. Equipment

1. Red Maddox rod with handle.

2. Horizontal prism bar with graduated prisms beginning with one prism diopter and increasing in power to at least eight prism diopters.

3. Acceptable substitutes:

AOC Site-Screener	Maddox rod and individual prisms
Bausch & Lomb	Maddox rod and Risley rotary prism
Orthorator	OPTEC 2000 Vision Tester
Keystone Orthoscope	OPTEC 900 Vision Tester
Keystone Telebinocular	Titmus Vision Tester

B. Examination Techniques

Test procedures to be used accompany the instruments. If the Examiner needs specific instructions for use of the horizontal prism bar and red Maddox rod, these may be obtained from a RFS.

III. Aerospace Medical Disposition

1. First- and Second-class: If an applicant exceeds the heterophoria standards (1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria), but shows no evidence of diplopia or serious eye pathology and all other aspects of the examination are favorable, the Examiner should not withhold or deny the medical certificate. The applicant should be advised that the FAA may require further examination by a qualified eye specialist.

2. Third-class: Applicants for a third-class certificate are not required to undergo heterophoria testing. However, if an applicant has strabismus or a history of diplopia, the Examiner should defer issuance of a certificate and forward the application to the AMCD. If the applicant wishes further consideration, the Examiner can help expedite FAA review by providing the applicant with a copy of FAA Form 8500-7, Report of Eye Evaluation.

ITEM 55. BLOOD PRESSURE

55. Blood Pressure		
	Systolic	Diastolic
(Sitting mm of Mercury)		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(b)(c), 67.213(b)(c), and 67.313(b)(c)

(b). No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds-

(1). Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2). May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c). No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved finds-

(1). Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2). May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Measurement of blood pressure is an essential part of the FAA medical certification examination. The average blood pressure while sitting should not exceed 155 mm mercury systolic and 95 mm mercury diastolic maximum pressure for all classes. A medical assessment is specified for all applicants who need or use antihypertensive medication to control blood pressure. (See B. below.)

II. Examination Techniques

In accordance with accepted clinical procedures, routine blood pressure should be taken with the applicant in the seated position. An applicant should not be denied or deferred first-, second-, or third-class certification unless subsequent recumbent blood pressure readings exceed those contained in this Guide. Any conditions that may adversely affect the validity of the blood pressure reading should be noted.

III. Aerospace Medical Disposition

A. Examining Options

1. An applicant whose pressures are within the above limits, who has not used antihypertensives for 30 days, and who is otherwise qualified should be issued a medical certificate by the Examiner.

2. An applicant whose blood pressure is slightly elevated beyond the FAA specified limits, may, at the Examiner's discretion, have a series of 3 daily readings over a 7-day period. If the indication of hypertension remains, even if it is mild or intermittent, the Examiner should defer certification and transmit the application to the AMCD with a note of explanation.

The Examiner must defer issuance of a medical certificate to any applicant whose hypertension has not been evaluated, who uses unacceptable medications, whose medical status is unclear, whose hypertension is uncontrolled, who manifests significant adverse effects of medication, or whose certification has previously been specifically reserved to the FAA.

B. Initial and Followup Evaluation for Hypertensives Under Treatment - See Hypertension Protocol

ITEM 56. PULSE

56. Pulse (Resting)

The medical standards do not specify pulse rates that, *per se*, are disqualifying for medical certification. These tests are used, however, to determine the status and responsiveness of the cardiovascular system. Abnormal pulse rates may be reason to conduct additional cardiovascular system evaluations.

II. Examination Techniques

The pulse rate is determined with the individual relaxed in a sitting position.

III. Aerospace Medical Disposition

If there is bradycardia, tachycardia, or arrhythmia, further evaluation is warranted and deferral may be indicated (see Item 36, page 61 for more details.) A cardiac evaluation may be needed to determine the applicant’s qualifications. Temporary stresses or fever may, at times, result in abnormal pulse readings. If the Examiner believes this to be the case, the applicant should be given a few days to recover and then be retested. If this is not possible, the Examiner should defer issuance, pending further evaluation.

ITEM 57. URINALYSIS

57. Urinalysis (if abnormal, give results)		
	Albumin	Sugar
☐ Normal ☐ Abnormal		

I. Code of Federal Regulations

All Classes: 14 CFR 67.113(a)(b), 67.213(a)(b), and 67.313(a)(b)

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

II. Examination Techniques

Any standard laboratory procedures are acceptable for these tests.

III. Aerospace Medical Disposition

Glycosuria or proteinuria is cause for deferral of medical certificate issuance until additional studies determine the status of the endocrine and/or urinary systems. If the glycosuria has been determined not to be due to carbohydrate intolerance, the Examiner may issue the certificate. Trace or 1+ proteinuria in the absence of a history of renal disease is not cause for denial.

The Examiner may request additional urinary tests when they are indicated by history or examination. These should be reported on FAA Form 8500-8 or attached to the form as an addendum.

ITEM 58. ECG

58. ECG (Date)		
MM	DD	YYYY

I. Code of Federal Regulations

First-Class: 14 CFR 67.111(b)(c)

(b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:

(1) At the first application after reaching the 35th birthday; and

(2) On an annual basis after reaching the 40th birthday.

(c) An ECG will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

Note: All applicants for certification may be required to provide ECG's when indicated by history or physical examination.

II. Examination Techniques

A. Date. The date of the most recent ECG shall be entered in Item 58 of FAA Form 8500-8 for all first-class applicants.

1. If a first-class applicant is due for a periodic ECG, the Examiner performs and transmits a current tracing according to established procedures. (See D. below).

However, some applicants (such as airline transport pilots who are employed by air carriers with medical departments) may have their company transmit a current ECG directly to the FAA. The Examiner need not require such an applicant to undergo another ECG examination and, if the applicant is otherwise qualified, a medical certificate may be issued. The Examiner should attach a statement to FAA Form 8500-8 to verify that a tracing has been transmitted from another source. The date of that ECG should be entered in Item 58.

2. If a first-class applicant is not required to have a periodic ECG with the current examination, the Examiner should record the date of the preceding ECG in Item 58.

3. If a second- or third-class applicant gives a history of having had an electrocardiogram, the test and date may be entered in Item 59. More importantly, the Examiner should indicate in Item 60 of FAA Form 8500-8 the history and its significance, if any.

4. If the applicant provides no statement and refuses to have a current ECG submitted by the Examiner, the Examiner should defer issuance of the medical certificate. When an ECG is due but is not submitted, the FAA will not affirm the applicant's eligibility for medical certification until the requested ECG has been received and interpreted as being within normal limits. Failure to respond to FAA requests for a required current ECG will result in denial of certification.

B. Currency

1. In order to meet regulatory requirements, a first-class applicant's periodic ECG must have been performed and transmitted within 60 days prior to the date of the first-class application (FAA Form 8500-8). The AMCD, verifies currency of all periodic ECG's.

2. There is no provision for issuance of a first-class medical certificate based upon a promise that an ECG will be obtained at a future date. In such circumstances, the Examiner should defer issuance and mail the completed FAA Form 8500-8 to the AMCD.

C. Interpretation

1. All ECG's required to establish eligibility for medical certification must be forwarded for interpretation to the Manager of the AMCD. This does not preclude submission of an interpretation by or through the Examiner.

2. Interpretation is accomplished by the staff and consultant cardiologists at the AMCD. Abnormalities are investigated to determine their significance, if any.

D. Technique and Reporting Format for Required ECG's on First-class Applicants

The method for recording and transmitting ECG's is by digital electronic data transfer by the Examiner to the AMCD. Senior Examiners who perform first-class medical examinations are required to have access to this capability.

International Examiners who submit ECG's should use the following format for preparation and submission:

1. See FAA Form 8065-1, Appendix B, Instructions for Preparation and Submittal of Electrocardiogram. However, the FAA also will accept 3-channel or 12-channel strips uncut or mounted on standard mounting paper. The following steps are essential to expedite processing of these tracings:

a. All leads must be properly identified.

b. Applicant and Examiner identification must be complete and the tracing must be dated.

2. Such hard-copy ECG's are microfilmed for permanent retention in the AMCD. Only tracings that can be microfilmed are acceptable.

3. Provide a Resting tracing. Tracings must be stapled to the ECG report form to ensure that all leads are appropriately coded and interpreted.

ITEM 59. OTHER TESTS GIVEN

59. Other Tests Given

I. Code of Federal Regulations

All Classes: 14 CFR 67.413(a)(b)

(a) Whenever the Administrator finds that additional medical information or history is necessary to determine whether an applicant for or the holder of a medical certificate meets the medical standards for it, the Administrator requests that person to furnish that information or to authorize any clinic, hospital, physician, or other person to release to the Administrator all available information or records concerning that history. If the applicant or holder fails to provide the requested medical information or history or to authorize the release so requested, the Administrator may suspend, modify, or revoke all medical certificates the airman holds or may, in the case of an applicant, deny the application for an airman medical certificate.

(b) If an airman medical certificate is suspended or modified under paragraph (a) of this section, that suspension or modification remains in effect until the requested information, history, or authorization is provided to the FAA and until the Federal Air Surgeon determines whether the person meets the medical standards under this part.

II. Examination Techniques

Additional medical information may be furnished through additional history taking, further clinical examination procedures, and supplemental laboratory procedures.

On rare occasions, even surgical procedures such as biopsies may be indicated. As a designee of the FAA Administrator, the Examiner has limited authority to apply 14 CFR 67.413 in processing applications for medical certification. When an Examiner

determines that there is a need for additional medical information, based upon history and findings, the Examiner is authorized to request prior hospital and outpatient records and to request supplementary examinations including laboratory testing and examinations by appropriate medical specialists. The Examiner should discuss the need with the applicant. The applicant should be advised of the types of additional examinations required and the type of medical specialist to be consulted. Responsibility for ensuring that these examinations are forwarded and that any charges or fees are paid will rest with the applicant. All reports should be forwarded to the AMCD, unless otherwise directed (such as by a RFS.)

Whenever, in the Examiner's opinion, medical records are necessary to evaluate an applicant's medical fitness, the Examiner should request that the applicant sign an authorization for the Release of Medical Information (FAA Form 8500-21.) (See Appendix B.) The Examiner should forward this authorization to the custodian of the applicant's records so that the information contained in the record may be obtained for attachment to the report of medical examination.

ITEM 60. COMMENTS ON HISTORY AND FINDINGS

60. Comments on History and Findings: AME shall comment on all "YES" answers in the Medical History section and for abnormal findings of the examination. (Attach all consultation reports, ECG's, X-rays, etc., to this report before mailing								
Significant Medical History	☐	**Yes**	☐	**No**	**Abnormal Physical Findings**	☐	**Yes**	☐	**No**

In addition to comments on positive historical or examination findings, this item gives the Examiner an opportunity to report observations and/or findings that are not asked for in other items on the application form. Concern about the applicant's behavior, abnormal situations arising during the conduct of tests, unusual findings, unreported history, and other information thought germane to aviation safety should be reported in Item 60. The Examiner should record dosage, the frequency, and purpose for all currently used medications.

If possible, all ancillary reports such as consultations, ECG's, x-ray release forms, and hospital or other treatment records should be attached. If the delay for those items would exceed 14 days, the Examiner should forward all available data to the AMCD, with a note specifying what additional information is being prepared for submission at a later date.

If there are no significant medical history items or abnormal physical findings, the Examiner should indicate this by checking the appropriate block.

ITEM 61. APPLICANT'S NAME

Item 61. Applicant's Name

The applicant's name should be typed.

ITEM 62. HAS BEEN ISSUED

Item 62. Has Been Issued	☐ Medical Certificate	☐ Medical & Student Pilot Certificate
☐	No Medical Certificate Issued	Deferred for Further Evaluation
☐	Has Been Denied	Letter of Denial Issued (Copy Attached)

The Examiner must check the proper box to indicate if the Medical Certificate, FAA Form 8500-9 (white), or Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), has been issued. If neither form has been issued, the Examiner must indicate denial or deferral by checking one of the two lower boxes. If denied, a copy of the Examiner's letter of denial, FAA Form 8500-2, should be forwarded to the AMCD.

A. Applicant's Refusal. When advised by an Examiner that further examination and/or medical records are needed, the applicant may elect not to proceed. The Examiner should note this on FAA Form 8500-8. No certificate should be issued, and the Examiner should forward the application form to the AMCD, even if the application is incomplete.

B. Anticipated Delay. When the Examiner anticipates a delay of more than 14 days in obtaining records or reports concerning additional examinations, the completed FAA Form 8500-8 should be transmitted to the AMCD with a note stating that additional information will follow. No medical certificate should be issued.

C. Issuance. When the Examiner receives all the supplemental information requested and finds that the applicant meets all the FAA medical standards for the class sought, the Examiner should issue a medical certificate.

D. Deferral. If upon receipt of the information the Examiner finds there is a need for even more information or there is uncertainty about the significance of the findings, certification should be deferred. The Examiner's concerns should be noted on FAA Form 8500-8 and the application transmitted to the AMCD for further consideration.

If the applicant decides at this point to abandon the application for a medical certificate, the Examiner should also note this on FAA Form 8500-8 and mail the incomplete form

to the AMCD. An incomplete FAA Form 8500-8 should not be transmitted to the AMCD for further consideration.

E. Denial. When the Examiner concludes that the applicant is clearly ineligible for certification, the applicant should be denied, using FAA Form 8500-2. (See Appendix B.) Use of this form will provide the applicant with the reason for the denial and with appeal rights and procedures. (See Chapter 1, Item 4, Medical Certification Decision Making and AME Assisted Special Issuance, page 4.)

ITEM 63. DISQUALIFYING DEFECTS

63. Disqualifying Defects (List by Item number)

Any disqualifying defects, diagnoses, or conditions must be listed by item number. Comments or discussion of specific observations or findings may be reported in Item 60 or submitted on a separate sheet of paper.

The Examiner should note in Item 60 that a Letter of Denial, FAA Form 8500-2, was given to the applicant.

ITEM 64. MEDICAL EXAMINER'S DECLARATION

Item 64. Medical Examiner's Declaration - I hereby certify that I have personally reviewed the medical history and personally examined the applicant named on this medical examination report. This report with any attachment embodies my findings completely and correctly.					
Date of Examination			**Aviation Medical Examiner's Name**		**Aviation Medical Examiner's Signature**
MM	**DD**	**YYYY**	**Street Address**		
					AME Serial Number
			City	**State**	**Zip Code**	**AME Telephone Number ( )**

If the application is not transmitted electronically, the date of examination and the Examiner's name and complete address must be typed. The Examiner must personally sign the completed form. The Examiner's serial number and telephone number should be entered in the blocks provided.

The FAA designates specific individuals as Examiners, and this status may not be further delegated to a physician who may be covering the designee's practice.

Although the FAA does not require that the Examiner sign the Examiner's copy of FAA Form 8500-8, the Examiner should at least personally initial this form.

AME Assisted Special Issuance (AASI)

The next 22 pages of the Guide for Aviation Medical Examiners introduce the AME Assisted Special Issuance (AASI) process.

If this is a first time issuance for a disqualifying disease/condition and the airman has all of the requisite medical information necessary for a determination, the Examiner must defer, and submit all of the documentation to the AMCD or contact the RFS.

For third-class applicants, the Guide refers to a number of selected medical conditions that are initially disqualifying and must be deferred to the AMCD or RFS. Following the granting of an Authorization for Special Issuance of a Medical Certificate (Authorization) by the AMCD or RFS's office. Each AASI has their own specialized clinical criteria, by which an Examiner may re-issue or certificate a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition, if otherwise qualified.

AASI FOR HISTORY OF ARTHRITIS

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- The type of arthritis
- A general assessment of condition and effect on daily activities
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- Comments regarding range of motion of neck, upper and lower extremities, hands, etc.

The Examiner should defer to AMCD or Region if:

- The applicant has developed any associated systemic manifestations
- If new joints become involved
- If the applicant is placed on medication(s) other than those acceptable medications listed below

ARTHRITIS MEDICATIONS

REQUIRES DEFERRAL	MAY BE USED
Plaquenil	Aspirin
Oral Chemotherapy - type medications Methotrexate, steroids >20mg of Prednisone equivalent daily, or Gold Therapy	Similar nonsteroidal anti-inflammatory drugs (NSAID), Ibuprofen, Naproxen

AASI FOR HISTORY OF ASTHMA

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- The applicant's current medical status that addresses frequency of attacks and whether the attacks have resulted in emergency room visits or hospitalizations
- The Examiner should caution the applicant to cease flying with any exacerbation as warned in §61.53
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- Results of Pulmonary Function Testing (PFT), if deemed necessary, performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The symptoms worsen
- There has been an increase in frequency of emergency room, hospital, or outpatient visits
- The FEV1 is less than 70% predicted value
- The applicant requires 3 or more medications for stabilization

- The applicant is using steroids in dosages equivalent to more than 20mg of Prednisone per day

AASI FOR HISTORY OF ATRIAL FIBRILLATION

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A summary of the applicant's medical condition since the last FAA medical examination, including a statement regarding any further episodes of atrial fibrillation
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- A report of a current 24-hour Holter Monitor performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- There is a recurrent episode of atrial fibrillation
- The applicant develops chronic atrial fibrillation
- The applicant is placed on anticoagulation therapy

AASI FOR HISTORY OF CHRONIC LYMPHOCYTIC LEUKEMIA

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A clinical followup report from the treating physician that includes an update of the condition of the applicant since the last examination
- The results of any applicable laboratory results, including a complete blood count performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The condition currently requires treatment with a chemotherapeutic agent
- The white blood cell count has risen above 80,000

AASI FOR HISTORY OF COLITIS (ULCERATIVE OR CROHN'S DISEASE)

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement regarding the extent of disease
- A statement regarding the frequency of exacerbation (the applicant should cease flying with any exacerbation as warned in §61.53)
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects

The Examiner should defer to the AMCD or Region if:

- There is a current exacerbation of the illness
- The applicant is taking medications such as Lomotil, steroid doses equivalent to more than 20mg of Prednisone per day, antispasmodics, and anticholinergics
- The pattern of exacerbations are increasing in frequency or severity; or applicant underwent surgical intervention

AASI FOR HISTORY OF COLON/COLORECTAL CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- An update of the status of the malignancy since the last FAA medical examination, to include the results of a current (performed within last 90 days) carcinoembryonic antigen (CEA), if a baseline value is available

The Examiner should defer to the AMCD or Region if:

- There has been any progression of the disease or an increase in CEA

AASI FOR HISTORY OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians make the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify what treating physician(s) information the applicant must provide to request the reissuance of the medical certificate. If this is a first time issuance with this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement regarding symptomatology of the condition
- A statement addressing any associated illnesses, such as heart failure
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- A pulmonary specialist evaluation that includes the results of a current pulmonary function test performed with last 90 days

The Examiner should defer to the AMCD or Region if:

- The FEV1 or FEV1/FVC is less than 70%
- The applicant has been placed on a steroid dose equivalent to greater than 20mg of Prednisone per day
- The applicant has developed an associated cardiac condition

AASI FOR HISTORY OF ORAL DIABETES MEDICATION(S)
DIABETES MELLITUS – TYPE II

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement attesting that the airman is maintaining his or her diabetic diet
- A statement regarding any diabetic symptomology
- The results of a current HgA1c level

The Examiner should defer to the AMCD or Region if:

- The applicant has been placed on insulin
- The HgA1c level is greater than 9.0 mg%
- The applicant has developed cardiovascular, neurological, renal and/or ophthalmological disease

AASI FOR HISTORY OF GLAUCOMA

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- Certification only granted for open-angle-glaucoma and ocular hypertension
- The FAA Form 8500-14, Glaucoma Eye Evaluation Form is filled out by the treating eye specialist
- A set of visual fields measurements is provided

The Examiner should defer to the AMCD or Region if:

- The FAA Form 8500-14 Glaucoma Eye Evaluation Form demonstrates visual acuity incompatible with the medical standards
- There is a change in visual fields or adverse change in ocular pressure

AASI FOR HISTORY OF HEPATITIS C

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- Any symptoms the applicant has developed
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- A current liver function profile performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The applicant has developed symptoms
- There has been a change in treatment regimen or the applicant has been placed on alpha-interferon
- Any side effects from required medication
- An adverse change in liver function studies

AASI FOR HISTORY OF HYPERTHYROIDISM

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA current statement of the condition since last FAA medical examination
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- Current thyroid function studies performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The thyroid function studies are elevated, suggesting inadequate treatment
- The applicant developed an associated illness, such as dysrhythmia

AASI FOR HISTORY OF HYPOTHYROIDISM

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects
- A statement regarding any other associated problems, such as cardiac or visual
- A statement regarding the current thyroid stimulating hormone (TSH) level performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The applicant develops a related problem in another system, such as cardiac
- The TSH level is elevated

AASI FOR HISTORY OF LYMPHOMA AND HODGKIN'S DISEASE

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- An update of the status of the disease from the last FAA medical examination and any testing deemed necessary by the treating physician

The Examiner should defer to the AMCD or Region if:

- There has been any recurrence or disease progression

AASI FOR HISTORY OF MIGRAINES

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement regarding the frequency of headaches and/or other associated symptoms since last followup report
- A statement regarding if the characteristics of the headaches changed
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects

The Examiner should defer to the AMCD or Region if:

- The frequency of headaches and/or other symptoms increase since the last followup report
- The applicant is placed on a medication, such as isometheptene mucate, narcotic analgesic, tramadol, tricyclic-antidepressant medication, etc.

AASI FOR HISTORY OF MITRAL OR AORTIC INSUFFICIENCY

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A summary of the applicant's medical condition since the last FAA medical examination, including a statement regarding any further episodes of atrial fibrillation
- A current 2-D echocardiogram with Doppler performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The gradient across the valve reaches 40 mm HG
- New symptoms occur
- An arrhythmia develops
- The treating physician or Examiner reports the murmur is now moderate to severe (Grade III or IV)

AASI FOR HISTORY OF MONOCULARITY

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A complete evaluation by an eye specialist, as reported on FAA Form 8500-7, reveals no pathology of non-involved eye
- A statement indicating that uncorrected distant visual acuity in the better eye is 20/200 or better and is corrected to 20/20 or better by lenses of no greater power than plus or minus 3.5 diopters spherical equivalent

Any applicant eligible for a medical certificate through special issuance under these guidelines shall pass a medical flight test, which may be arranged through the appropriate AMCD or RFS. While waiting to complete a medical flight test, an applicant who is otherwise qualified for certification may be issued a medical certificate, which must contain the limitation "Valid for Student Pilot Privileges Only." A statement indicating that a 6-month period has elapsed to allow for adaptation to monocularity.

NOTE: If the applicant's distant vision in the poorer eye corrects to 20/200, no uncorrected vision limitation or refractive error limitation will be applied to either eye of a first-, second-, or third-class applicant with significant flight experience (250 hours or more of flight time). This allows consideration for useful peripheral vision in the poorer eye and flight experience.

AASI FOR HISTORY OF PAROXYSMAL ATRIAL TACHYCARDIA

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement regarding any recurrences since the last FAA medical examination
- The name and dosage of medication(s) used for treatment and/or prevention with comment regarding side effects

The Examiner should defer to the AMCD or Region if:

- There have been one or more recurrences
- The applicant has received some treatment that was not reported in the past, such as radiofrequency ablation

AASI FOR HISTORY OF PROSTATE CANCER

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A current status of the medical condition to include any testing deemed necessary
- A current prostate specific antigen (PSA) level performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- The PSA rises at a rate above 0.75 ng/ml per year
- A new treatment is initiated
- Any metastasis has occurred

AASI FOR HISTORY OF RENAL CALCULI

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A statement from your treating physician regarding the location of the retained stone(s), estimation as to size of stone, and likelihood of becoming symptomatic
- A current report of appropriate imaging study (IVP, KUB, Ultrasound, or Spiral CT Scan) and provide a metabolic work-up, both performed within last 90 days

The Examiner should defer to the AMCD or Region if:

- If the treating physician comments that the current stone has a likelihood of becoming symptomatic
- If the retained stone(s) has moved when compared to previous evaluations
- If the stone(s) has become larger when compared to previous evaluation

AASI FOR HISTORY OF SLEEP APNEA

AME Assisted Special Issuance (AASI) is a process that provides Examiner's the ability to reissue a third-class airman medical certificate to an applicant with a medical history of an initially disqualifying condition.

The FAA staff physicians provide the initial certification decision and grant the Authorization in accordance with part 67 (14 CFR § 67.401). The Authorization letter is accompanied by attachments that specify the information that treating physician(s) must provide for the reissuance determination. If this is a first time issuance for this disease/condition, and the airman has all of the requisite medical information necessary for a determination, you must defer and submit all of the documentation to the AMCD, or contact your RFS for the initial determination.

Examiner's may reissue an airman medical certificate, if the applicant provides the following:

- An Authorization granted by the FAA
- A current report (performed within last 90 days) from the treating physician that references the present treatment, whether this has eliminated any symptoms and with specific comments regarding daytime sleepiness. If there is any question about response or compliance with treatment, then a Maintenance of Wakefulness Test (MWT) will be required

The Examiner should defer to the AMCD or Region if:

- There is any question concerning the adequacy of therapy
- The applicant appears to be non-compliant with therapy
- The MWT demonstrates sleep deficiency
- The applicant has developed some associated illness, such as right-sided heart failure

PROTOCOLS

The following 23 pages of the Guide for Aviation Medical Examiners lists the Disease Protocols, and course of action that should be taken by the Examiner as defined by aeromedical decision considerations.

PROTOCOL FOR CARDIOVASCULAR EVALUATION

A current cardiovascular evaluation must include:

- An assessment of personal and family medical history
- Clinical cardiac and general physical examination
- An assessment and statement regarding the applicant's medications, functional capacity, modifiable cardiovascular risk factors
- Motivation for any necessary change
- Prognosis for incapacitation
- Blood chemistries (fasting blood sugar, current blood lipid profile to include total cholesterol, HDL, LDL, and triglycerides) performed within last 90 days

PROTOCOL FOR EVALUATION OF CORONARY HEART DISEASE

Myocardial infarction, angina pectoris, or other evidence of coronary heart disease is covered in this protocol. Reports and test results relating to the diagnosis in accordance with the attached protocol must be obtained and forwarded to the AMCD.

A. Requirements are for consideration for any class of airman medical certification.

1. A 6-month recovery period must elapse after the event (angina, infarction, bypass surgery, angioplasty, or stenting) before consideration can be given for medical certification.

2. Hospital admission summary (history and physical), coronary catheterization report, and operative report regarding all cardiac events and procedures.

3. A current cardiovascular evaluation must include an assessment of personal and family medical history; a clinical cardiac and general physical examination; an assessment and statement regarding the applicant's medications, functional capacity, modifiable cardiovascular risk factors, motivation for any necessary change, prognosis for incapacitation; and blood chemistries (fasting blood sugar, current blood lipid profile to include total cholesterol, HDL, LDL, and triglycerides).

4. A maximal ECG treadmill stress test must be performed no sooner than 6-months post event. All stress testing should achieve 100 percent of maximal predicted heart rate unless medically contraindicated or prevented either by symptoms, conditioning, or concurrent use of medication, such as: B-blockers, calcium channel blockers (spec. diltiazem or verapamil), and/or digitalis preparations. With the consent of the attending physician, these medications should be discontinued for at least 48 hours prior to testing in order to attain maximal stress.

The blood pressure/pulse recordings at various stages and actual ECG tracings must be submitted. Tracings must include a rhythm strip, a full 12-lead ECG recorded at rest (supine and standing) and during hyperventilation while standing, one or more times during each stage of exercise, at the end of each stage, at peak exercise, and every minute during recovery for at least 5 minutes or until the tracings return to baseline level. The worksheet and interpretive report must be submitted. Computer-generated, sample cycle ECG tracings are unacceptable in lieu of the complete tracings.

A **SPECT** myocardial perfusion exercise stress test using technetium agents and/or thallium may be required for consideration for any class if clinically

indicated or the exercise stress test is abnormal by any of the usual parameters. The interpretive report and all **SPECT** images, preferably in black and white, must be submitted.

> NOTE: If cardiac catheterization and/or coronary angiography have been performed, all reports and the actual films (if films are requested) must be submitted for review. Copies should be made of all films as a safeguard against loss. Films should be labeled with the name of the pilot and a return address.

B. Additional requirements for first or unlimited* second-class medical certification. The following should be accomplished no sooner than 6-months post event:

1. Post-event coronary angiography. The application may be considered without post-event angiography but certification for first- and unlimited second-class is unlikely without it.

2. A maximal thallium exercise stress test (See A. 4).

3. FAA Form 8500-20, Medical Exemption Petition (Operational Questionnaire). The applicant should indicate if a lower class medical certificate is acceptable in the event ineligible for class sought.

C. Certification. Applicants found qualified for an airman medical certificate will be required to provide periodic follow-up cardiovascular evaluations including maximal stress testing. Additional diagnostic testing modalities, including radionuclide studies, may be required if indicated.

No consideration will be given for an Authorization until all the required data have been received. The use of the applicant's full name, date of birth, and social security number on all correspondence and reports will aid the agency in locating the proper file.

It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. In order to expedite processing, it is suggested that the information be sent in ONE MAILING, when possible, to:

Medical Appeals Section, AAM-313 OR
Aerospace Medical Certification Division
Federal Aviation Administration
Post Office Box 26080
Oklahoma City OK 73125-9914

Medical Appeals Section, AAM-313
Aerospace Medical Certification Division
Federal Aviation Administration
6700 S MacArthur Blvd., Room B-13
Oklahoma City OK 73169

***Limited second-class medical certificate refers to a second-class certificate with a functional limitation such as, "Not Valid for Carrying Passengers for Compensation or Hire", "Not Valid for Pilot in Command", "Valid Only When Serving as a Pilot Member of a Fully Qualified Two-Pilot Crew", "Limited to Flight Engineer Duties Only", etc.**

PROTOCOL FOR HISTORY OF INSULIN-TREATED DIABETES MELLITUS - TYPE I and TYPE II

The FAA has established a policy that permits the special issuance medical certification of insulin-treated applicants for third-class medical certification. Consideration will be given only to those individuals who have been clinically stable on their current treatment regimen for a period of 6 months or more. Consideration is *not* being given for first- or second-class certification. Individuals certificated under this policy will be required to provide substantial documentation regarding their history of treatment, accidents related to their disease, and current medical status. If certificated, they will be required to adhere to stringent monitoring requirements and are prohibited from operating aircraft outside the United States. The following is a summary of the evaluation protocol and an outline of the conditions that the FAA will apply:

A. Initial Certification

1. The applicant must have had no recurrent (two or more) episodes of hypoglycemia in the past 5 years and none in the preceding 1 year which resulted in loss of consciousness, seizure, impaired cognitive function or requiring intervention by another party, or occurring without warning (hypoglycemia unawareness).

2. The applicant will be required to provide copies of all medical records as well as accident and incident records pertinent to their history of diabetes.

3. A report of a complete medical examination preferably by a physician who specializes in the treatment of diabetes will be required. The report must include, as a minimum:

a. Two measurements of glycosylated hemoglobin (total A_1 or A_{1c} concentration and the laboratory reference range), separated by at least 90 days. The most recent measurement submitted must be no more than 90 days old.

b. Specific reference to the applicant's insulin dosages and diet.

c. Specific reference to the presence or absence of cerebrovascular, cardiovascular, or peripheral vascular disease or neuropathy.

d. Confirmation by an eye specialist of the absence of clinically significant eye disease.

e. Verification that the applicant has been educated in diabetes and its control and understands the actions that should be taken if complications, especially hypoglycemia, should arise. The examining physician must also verify that the applicant has the ability and willingness to properly monitor and manage his or her diabetes.

f. If the applicant is age 40 or older, a report, with ECG tracings, of a maximal graded exercise stress test.

g. The applicant must submit a statement from his/her treating physician, Examiner, or other knowledgeable person attesting to the applicant's dexterity and ability to determine blood glucose levels using a recording glucometer.

NOTE: Student pilots may wish to ensure they are eligible for medical certification prior to beginning or resuming flight instruction or training. In order to serve as a pilot in command, you must have a valid medical certificate for the type of operation performed.

B. Subsequent Medical Certification

1. For documentation of diabetes management, the applicant will be required to carry and use a whole blood glucose measuring device with memory and must report to the FAA immediately any hypoglycemic incidents, any involvement in accidents resulting in serious injury (whether or not related to hypoglycemia), and any evidence of loss of control of diabetes, change in treatment regimen, or significant diabetic complications. With any of these occurrences, the individual must cease flying until cleared by the FAA.

2. At 3-month intervals, the airman must be evaluated by the treating physician. This evaluation must include a general physical examination, review of the interval medical history, and the results of a test for glycosylated hemoglobin concentration. The physician must review the record of the airman’s daily blood glucose measurements and comment on the results. The results of these quarterly evaluations must be accumulated and submitted annually unless there has been a change. (See No. 1 above. If there has been a change the individual must report the change(s) to the FAA and wait for an eligibility letter before resuming flight duties).

3. On an annual basis, the reports from the examining physician must include confirmation by an eye specialist of the absence of significant eye disease.

4. At the first examination after age 40 and at 5-year intervals, the report, with ECG tracings, of a maximal graded exercise stress test must be included in consideration of continued medical certification.

C. Monitoring And Actions Required During Flight Operations

To ensure safe flight, the insulin using diabetic airman must carry during flight a recording glucometer, adequate supplies to obtain blood samples, and an amount of rapidly absorbable glucose, in 10 gm portions, appropriate to the planned duration of the flight. The following actions shall be taken in connection with flight operations:

1. One-half hour prior to flight, the airman must measure the blood glucose concentration. If it is less than 100 mg/dl the individual must ingest an appropriate (not less than 10 gm) glucose snack and measure the glucose concentration one-half hour later. If the concentration is within 100 -- 300 mg/dl, flight operations may be undertaken. If less than 100, the process must be repeated; if over 300, the flight must be canceled.

2. One hour into the flight, at each successive hour of flight, and within one-half hour prior to landing, the airman must measure his or her blood glucose concentration. If the concentration is less than 100 mg/dl, a 20 gm glucose snack shall be ingested. If the concentration is 100 --300 mg/dl, no action is required. If the concentration is greater that 300 mg/dl, the airman must land at the nearest suitable airport and may not resume flight until the glucose concentration can be maintained in the 100 -- 300 mg/dl range. In respect to determining blood glucose concentrations during flight, the airman must use judgment in deciding whether measuring concentrations or operational demands of the environment (e.g., adverse weather, etc.) should take priority. In cases where it is decided that operational demands take priority, the airman must ingest a 10 gm glucose snack and measure his or her blood glucose level 1 hour later. If measurement is not practical at that time, the airman must ingest a 20 gm glucose snack and land at the nearest suitable airport so that a determination of the blood glucose concentration may be made.

PROTOCOL FOR HISTORY OF ORAL DIABETES MEDICATION(S)
DIABETES MELLITUS – TYPE II

Applicants with a diagnosis of diabetes mellitus controlled by use of an oral medication may be considered by the FAA for Special Issuance of a Medical Certificate. Following initiation of oral medication treatment, a 60-day period must elapse prior to certification to assure stabilization, adequate control, and the absence of side effects or complications from the medication.

Initial certification decisions shall not be made by the Examiner. These cases will be deferred to the AMCD. Examiners may be delegated authority to make subsequent certification decisions, subject to AMCD review and consideration.

The initial determination of eligibility will be made on the basis of a report from the treating physician. For favorable consideration, the report must contain a statement regarding the medication used, dosage, the absence or presence of side effects and clinically significant hypoglycemic episodes, and an indication of satisfactory control of the diabetes. The results of an A1C hemoglobin determination within the past 30 days must be included. Note must also be made of the absence or presence of cardiovascular, neurological, renal, and/or ophthalmological disease. The presence of one or more of these associated diseases will not be, per se, disqualifying, but the disease(s) must be carefully evaluated to determine any added risk to aviation safety.

Recertification decisions will also be made on the basis of reports from the treating physician. The contents of the report must contain the same information required for initial certification and specifically reference the presence or absence of satisfactory control, any change in the dosage or type of oral hypoglycemic drug, and the presence or absence of complications or side effects from the medication. In the event of an adverse change in the applicant's diabetic status (poor control or complications or side effects from the medication), or the appearance of an associated systemic disease, an Examiner who has been given the authority to issue a certificate pending further review and consideration by the AMCD must defer certification to the AMCD.

If, upon further review, it is decided that recertification is appropriate, the Examiner may again be given the authority to issue certificates (subject to AMCD review and consideration) based on data provided by the treating physician, including such information as may be required to assess the associated medical condition(s).

As a minimum, followup evaluations by the treating physician of the applicant's diabetes status are required annually for all classes.

Airmen who are diabetics should be counseled by Examiners regarding the significance of their disease and its possible complications. They should be

informed of the potential for hypoglycemic reactions and cautioned to remain under close medical surveillance by their treating physicians. They should also be advised that should their oral hypoglycemic be changed or dosages modified, they should not perform airman duties until the treating physician has concluded that their conditions are under control and present no hazard to aviation safety. Airmen who use insulin for the treatment of their diabetics, may only be considered for special issuance for third-class medical certification.

PROTOCOL FOR HISTORY OF DIABETES MELLITUS CONTROLLED BY DIET AND EXERCISE

A blood glucose determination is not a routine part of the FAA medical evaluation for any class of medical certificate. However, the examination does include a routine urinalysis. A medical history or clinical diagnosis of diabetes mellitus may be considered previously established when the diagnosis has been or clearly could be made because of supporting laboratory findings and/or clinical signs and symptoms. When an applicant with a history of diabetes is examined for the first time, the Examiner should explain the procedures involved and assist in obtaining prior records and current special testing.

Applicants with a diagnosis of diabetes mellitus controlled by diet alone are considered eligible for all classes of medical certificates under the medical standards, provided they have no evidence of associated disqualifying cardiovascular, neurological, renal, or ophthalmological disease. Specialized examinations need not be performed unless indicated by history or clinical findings. The Examiner must document these determinations on FAA Form 8500-8.

PROTOCOL FOR HISTORY OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) RELATED CONDITIONS

Persons on antiretroviral medication will be considered only if the medication is approved by the U.S. Food and Drug Administration and is used in accordance with an acceptable drug therapy protocol. Acceptable protocols are cited in *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents* developed by the Department of Health and Human Services Panel on Clinical Practices for Treatment of HIV Infection.

Application for special issuance must include reports of examination by a physician knowledgeable in the treatment of HIV-infected persons and a medical history emphasizing symptoms and treatment referable to the immune and neurologic system. In addition, these reports must include a "viral load" determination by polymerase chain reaction (PCR), CD4+ lymphocyte count, a complete blood count, and the results of liver function tests. An assessment of cognitive function (preferably by *Cogscreen* or other test battery acceptable to the Federal Air Surgeon) must be submitted. Additional cognitive function tests may be required as indicated by results of the cognitive tests. At the time of initial application, viral load must not exceed 1,000 copies per milliliter of plasma, and cognitive testing must show no significant deficit(s) that would preclude the safe performance of airman duties.

Followup evaluations of applicants granted certification will include quarterly determinations of viral load by PCR, a CD4+ cell count, and the results of other laboratory and clinical tests deemed appropriate by the treating physician. These will be included in a written status report provided by the treating physician every 6 months. In addition, the results of cognitive function studies will be required at annual intervals for medical clearance or medical certification of ATCS's and first- and second-class applicants. Third-class applicants will be required to submit cognitive function studies every 2 years.

Adverse clinical findings, including significant changes in cognitive test results or an increased viral load exceeding 5,000 copies per milliliter shall constitute a basis for withdrawing medical certification.

Exceptions, if any, will be based on individual consideration by the Federal Air Surgeon.

PROTOCOL FOR EVALUATION OF HYPERTENSION

Initial: The Examiner may issue first-, second-, or third-class medical certificates to otherwise qualified airmen whose hypertension is adequately controlled with acceptable medications without significant adverse effects. In such cases, the Examiner shall:

1. Conduct an evaluation or, *at the applicant's option,* review the report of a current (within preceding 6 months) cardiovascular evaluation by the applicant's attending physician. This evaluation must include pertinent personal and family medical history, including an assessment of the risk factors for coronary heart disease, a clinical examination including at least three blood pressure readings, separated by at least 24-hours each, a resting ECG, and a report of fasting plasma glucose, cholesterol (LDL/HDL), triglycerides, potassium, and creatinine levels. A maximal electrocardiographic exercise stress test will be accomplished *if it is indicated by history or clinical findings.* Specific mention must be made of the medications used, their dosage, and the presence, absence, or history of adverse effects.

2. Summarize the results of this evaluation in Item 60 of the transmitted application and forward the appropriate documents to the AMCD.

3. Report the results of any additional tests or evaluations that have been accomplished.

4. If appropriate, state in Item 60 on the FAA Form 8500-8 that the applicant's blood pressure is adequately controlled with acceptable medication, there are no known significant adverse effects, and no other cardiovascular, cerebrovascular, or arteriosclerotic disease is evident.

5. Defer certification if the person declines any of the recommended evaluations.

Medications:

1. Medications acceptable to the FAA for treatment of hypertension in airmen include all Food and Drug Administration (FDA) approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (such as, reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are **not** usually acceptable to the FAA. Dosage levels should be the minimum necessary to obtain optimal clinical control and should not be modified to influence the certification decision.

2. The Examiner may submit for the Federal Air Surgeon's review requests for Authorization under the special issuance section of part 67 (14 CFR 67.401) in

cases in which these or other usually unacceptable medications are used. Specialty evaluations are required in such cases and must provide information on why the specific drug is required. The Examiner's own recommendation should be included. The Examiner must defer issuance of a medical certificate to any applicant whose hypertension is being treated with unacceptable medications.

Followup: Followup evaluations must include a current status report describing at least the medications used and their dosages, the adequacy of blood pressure control, the presence or absence of side effects, the presence or absence of end-organ complications and the results of any appropriate tests or studies. This evaluation can be performed by the Examiner if the Examiner can attest to the accuracy of the above information.

Hypertension follow-ups are required annually for first- and second-class medical certificate applicants and at the time of renewal for third-class certificate applicants.

Duration of Certificates: The duration of the certificate will be valid until the time of normal expiration, unless otherwise specified by the FAA.

PROTOCOL FOR EVALUATION OF IMPLANTED PACEMAKER

A 2-month recovery period must elapse after the pacemaker implantation to allow for recovery and stabilization. Submit the following:

1. Copies of hospital/medical records pertaining to the requirement for the pacemaker, make of the generator and leads, model and serial number, admission/discharge summaries, operative report, and all ECG tracings.

2. Evaluation of pacemaker function to include description and documentation of underlying rate and rhythm with the pacer turned "off" or at its lowest setting (pacemaker dependency), programmed pacemaker parameters, surveillance record, and exclusion of myopotential inhibition and pacemaker induced hypotension (pacemaker syndrome), Powerpack data including beginning of life (BOL) and elective replacement indicator/end of life (ERI/EOL).

3. Readable samples of all electronic pacemaker surveillance records post surgery or over the past 6 months, or whichever is longer. It must include a sample strip with pacemaker in free running mode and unless contraindicated, a sample strip with the pacemaker in magnetic mode.

4. An assessment and statement from a physician regarding general physical and cardiac examination to include symptoms or treatment referable to the cardiovascular system; the airman's interim and current cardiac condition, functional capacity, medical history, and medications.

5. A report of current fasting blood sugar and a current blood lipid profile to include: total cholesterol, HDL, LDL, and triglycerides.

6. A current Holter monitor evaluation for at least 24-consecutive hours, to include select representative tracings.

7. A current M-mode, 2-dimensional echocardiogram with Doppler.

8. A current Maximal Graded Exercise Stress Test Requirements.

An ECG treadmill stress test should achieve 100% of predicted maximal heart rate unless medically contraindicated or prevented either by symptoms or medications. Beta blockers and calcium channel blockers (spec. diltiazem and verapamil), or digitalis preparations should be discontinued for 48 hours prior to testing (if not contraindicated) in order to obtain maximum heart rate and only with consent of the treating physician. The worksheet with blood pressure/pulse recordings at various stages, interpretive report, and actual ECG tracings must be submitted. Tracings must include a rhythm strip, a full 12-lead ECG recorded at rest (supine and standing) and during hyperventilation while standing, one or more times during each stage of exercise, at the end of each stage, at peak exercise, and every minute during recovery for at least five

minutes or until the tracings return to baseline level. Computer generated, sample-cycle ECG tracings are unacceptable in lieu of the standard tracings. If submitted alone may result in deferment until this requirement is met.

9. It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. A medical release form may help in obtaining the necessary information.

All information shall be forwarded in one mailing to:

Medical Appeals Branch, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration Post Office Box 26080 Oklahoma City OK 73125-9914	OR	Medical Appeals Branch, AAM-313 Aerospace Medical Certification Division Federal Aviation Administration 6700 S MacArthur Blvd., Room B-13 Oklahoma City OK 73169

No consideration can be given for special issuance until all the required data has been received.

The use of the airman's full name and date of birth on all correspondence and reports will aid the agency in locating the proper file.

PROTOCOL FOR MUSCULOSKELETAL EVALUATION

The Examiner should defer issuance.

An applicant with a history of musculoskeletal conditions must submit the following if consideration for medical certification is desired:

- Current status report
- Functional status report
- Degree of impairment as measured by strength, range of motion, pain

NOTE: If the applicant is otherwise qualified, the FAA may issue a limited certificate. This certificate will permit the applicant to proceed with flight training until ready for a medical flight test. At that time, and at the applicant's request, the FAA (usually the AMCD) will authorize the student pilot to take a medical flight test in conjunction with the regular flight test. The medical flight test and regular private pilot flight test are conducted by an FAA inspector. This affords the student an opportunity to demonstrate the ability to control the aircraft despite the handicap. The FAA inspector prepares a written report and indicates whether there is a safety problem. A medical certificate and statement of demonstrated ability (SODA), without the student limitation, may be provided to the inspector for issuance to the applicant, or the inspector may be required to send the report to the FAA medical officer who authorized the test.

When prostheses are used or additional control devices are installed in an aircraft to assist the amputee, those found qualified by special certification procedures will have their certificates limited to require that the device(s) (and, if necessary, even the specific aircraft) must always be used when exercising the privileges of the airman certificate.

PROTOCOL FOR PEPTIC ULCER

An applicant with a history of an active ulcer within the past 3-months or a bleeding ulcer within the past 6-months must provide evidence that the ulcer is healed if consideration for medical certification is desired.

Evidence of healing must be verified by a report from the attending physician that includes the following information:

- Confirmation that the applicant is free of symptoms
- Radiographic or endoscopic evidence that the ulcer has healed
- The name and dosage of medication(s) used for treatment and/or prevention, along with a statement describing side effects or removal

This information must be submitted to the AMCD. Under favorable circumstances, the FAA may issue a certificate with special requirements. For example, an applicant with a history of bleeding ulcer may be required to have the physician submit followup reports every 6 months for 1 year following initial certification.

The prophylactic use of medications including simple antacids, H-2 inhibitors or blockers, proton pump inhibitors, and/or sucralfates may not be disqualifying, if free from side effects.

An applicant with a history of gastric resection for ulcer may be favorably considered if free of sequelae.

PROTOCOL FOR RENAL TRANSPLANT

An applicant with a history of renal transplant must submit the following if consideration for medical certification is desired:

1. Hospital admission, operative report and discharge summary

2. Current status report including:

    - The etiology of the primary renal disease
    - History of hypertension or cardiac dysfunction
    - Sequela prior to transplant
    - A comment regarding rejection or graft versus host disease (GVHD)
    - Immunosuppressive therapy and side effects, if any
    - The results of the following laboratory results: CBC, BUN, creatinine, and electrolytes

PROTOCOL FOR SUBSTANCES OF DEPENDENCE/ABUSE (DRUGS - ALCOHOL)

The Examiner must defer issuance.

An applicant with a history of substances of dependence/abuse (drugs - alcohol) must submit the following if consideration for medical certification is desired:

- A current status report from a health care provider specializing in addictive disorders.
- A personnel statement attesting to the substance and amount, and date last used
- If attended a rehabilitation clinic/center, provide dates and copies of treatment plan

NOTE: The applicant may be required to submit additional information before medical disposition can be rendered.

PROTOCOL FOR THROMBOEMBOLIC DISEASE

An applicant with a history of thromboembolic disease must submit the following if consideration for medical certification is desired:

1. Hospital admission and discharge summary

2. Current status report including:

- Detailed family history of thromboembolic disease
- Neoplastic workup, if clinically indicated
- PT/PTT
- Protein S & C
- Leiden Factor V
- If still anticoagulated, submit all International Normalized Ratio (INR) from time of hospital discharge to present

PROTOCOL FOR CARDIAC VALVE REPLACEMENT

Applicants with tissue and mechanical valve replacements are considered after the following:

A 6-month recovery period shall elapse after the valve replacement to ensure recovery and stabilization. First- and second-class initial applicants are reviewed by the Federal Air Surgeon's cardiology panel.

1. Copies of hospital/medical records pertaining to the requirement for the valve to include make, model, serial number and size, admission/ discharge summaries, operative report, and pathology report.

2. A current evaluation from your attending physician regarding your use of Coumadin to confirm stability without complications, drug dose history and schedule, and International Normalized Ratio (INR) values accomplished at least monthly during the past 6-month period of observation.

3. A current report from your treating physician regarding the status of your cardiac valve replacement. This report should address your general cardiovascular condition as well as any symptoms of valve or heart failure and any related abnormal physical findings, and must reveal satisfactory recovery and cardiac function without evidence of embolic phenomena, significant arrhythmia, structural abnormality, or ischemic disease.

4. A current 24-hour Holter monitor evaluation to include select representative tracings.

5. Current M-mode, 2-dimensional echocardiogram with Doppler. Please submit the video resulting from this study.

6. A current maximal treadmill stress test. An ECG treadmill stress test should achieve 100 percent of predicted maximal heart rate unless medically contraindicated or prevented either by symptoms or medications. Beta blockers and calcium channel blockers (specifically diltiazem and verapamil), or digitalis preparations should be discontinued for 48 hours prior to testing (if not contraindicated) in order to obtain maximum heart rate and only with consent of the treating physician. The worksheet with blood pressure/pulse recordings at various stages, interpretive report, and copies of actual ECG tracings must be submitted. Tracings must include a rhythm strip, a full 12-lead ECG recorded at rest (supine and standing) and during hyperventilation while standing, one or more times during each stage of exercise, at the end of each stage, at peak exercise, and every minute during recovery for at least five minutes or until the tracings return to baseline level. Computer generated, sample-cycle ECG tracings are unacceptable in lieu of the standard tracings and if submitted alone may result in deferment until this requirement is met.

7. If cardiac catheterization and coronary angiography have been performed, all reports and films must be submitted, if required, for review by the agency. Copies should be made of all films as a safeguard against loss.

8. Following heart valve replacement, first- and second-class certificate holders shall be followed at 6-month intervals with clinical status reports and at 12-month intervals with a CVE, standard ECG, and Doppler echocardiogram. Holter monitoring and GXT's may be required periodically if indicated clinically. For third-class certificate holders, the above followup testing will be required annually unless otherwise indicated.

9. Mechanical Heart Valve Replacement. All applicants following mechanical heart valve replacement must be anticoagulated.

10. Multiple Heart Valve Replacement. Applicants who have received multiple heart valve replacements must be deferred. However, the AMCD may consider certification of all classes of applicants who have undergone a Ross procedure (pulmonic valve transplanted to the aortic position and pulmonic valve replaced by a bioprosthesis).

It is the responsibility of each applicant to provide the medical information required to determine his/her eligibility for airman medical certification. A medical release form may help in obtaining the necessary information.

All information shall be forwarded in <u>one mailing</u> to:

FAA Civil Aerospace Medical Institute Medical Appeals Branch, AAM-313 Post Office Box 26080 Oklahoma City OK 73125-9914	<u>OR</u>	FAA Civil Aerospace Medical Institute Medical Appeals Branch, AAM-313 6700 S MacArthur Blvd. Oklahoma City OK 73169

No consideration can be given for special issuance until all the required data has been received.

Use of the above reference number and your full name on any reports or correspondence will aid us in locating your file.

PROTOCOL FOR VALVULOPLASTY

An applicant with a history of valvuloplasty must submit the following if consideration for medical certification is desired.

Valvuloplasty (surgical or balloon) for Mitral or Pulmonary Stenosis:

Initial:

- A 6-month period must elapse before consideration for any class medical certification
- Cardiovascular Examination (CVE)
- ECG
- Echocardiography and a symptom-limited GXT must show an acceptably increased exercise capacity without ischemia

Followup: Required annually.

- CVE
- Echocardiography
- ECG
- When indicated a 24-hour Holter and a GXT

Valvuloplasty (surgical or balloon) for Aortic Stenosis:

- A favorable determination is unlikely if this procedure was performed after age 16
- Same as the above initial requirements

GLOSSARY/ACRONYMS

AAM - Office of Aerospace Medicine

AASI - AME Assisted Special Issuance - Disposition criteria for AME's who may certificate an eligible applicant seeking third-class medical certificates, or when to defer issuance to the AMCD

AMCD - Aerospace Medical Certification Division - located at the Civil Aerospace Medical Institute in Oklahoma City, Oklahoma

AMCS - Airman Medical Certification System - allows the AME to electronically submit FAA Form 8500-8, Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, to AMCD

AME - Aviation Medical Examiner - a physician designated by the FAA and given the authority to perform airman physical examinations for issuance of second- and third-class medical and student pilot certificates

ATCS - Air Traffic Control Specialist

AV - Atrioventricular

BUN - Blood Urea Nitrogen Test

CAD - Coronary Artery Disease

CAMI - Civil Aerospace Medical Institute - located in Oklahoma City, Oklahoma

CAT - Computerized Axial Tomography Scan

CBC - Complete Blood Count

CEA - Carcinoembryonic Antigen

CFR - Code of Federal Regulations

CHD - Coronary Heart Disease

CT - Computed Tomography Scan

CVE - Cardiovascular Evaluation

DOT - Department of Transportation

DUI/DWI - Driving Under The Influence/Driving While Intoxicated

ECG - Electrocardiogram

ECHO - Echocardiographic Images

ENT – Ear, Nose, and Throat

FAA - Federal Aviation Administration

FAR - Federal Aviation Regulations

FSDO - Flight Standards District Office

GXT - Graded Exercise Test

IVP - Intravenous Pyelography Test

KUB – Kidneys, Ureters and Bladder

MFO - Medical Field Office

MFT - Medical Flight Test

MRI - Magnetic Resonance Imaging

MVP - Mitral Valve Prolapse

NTSB - National Transportation Safety Board

RF – Radio Frequency Ablation

RFS - Regional Flight Surgeon

PAC's - Premature Arterial Contractions

PET - Radioactive High-Tech Scan

PFT - Pulmonary Function Test

PSA - Prostate-Specific Antigen

PT - Prothrombin Time

PTT - Partial Thromboplastin Time

PVC's - Premature Ventricular Contractions

SODA - Statement of Demonstrated Ability

TFT -Thyroid Function Test

U.S. Department
of Transportation

**Federal Aviation
Administration**

Federal Aviation Regulations

Title 14 of
Code of Federal Regulations

Part 67
Medical Standards and Certification

This FAA publication of the basic Part 67, effective November 1, 1962, incorporates Amendments 67–1 through 67–17 with preambles.

Published
August 1996 for Aviation Medical Examiners

LAST UPDATE: September 24, 2003

INTRODUCTORY NOTE

Part 67 is codified under Subchapter D, Airmen, of Title 14 of the Code of Federal Regulations.

This FAA publication of the basic Part 67, effective Novermber 1, 1962, incorporates Amendments 67–1 through 67–17.

Bold brackets **[[ ]]** throughout the regulation indicate the most recently changed or added material for that particular subpart. The amendment number and effective date of new material appear in bold brackets at the end of each affected section.

NOTICE TO FAA AND OTHER GOVERNMENT USERS

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LAST UPDATE: September 24, 2003

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Part 67—Medical Standards and Certification

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Contents—Continued

Adoption of Subchapter D

Adopted: August 6, 1962 **Effective: November 1, 1962**

This amendment adds Subchapter D ''Airmen'' to Chapter I of Title 14 of the Code of Federal Regulations. The amendment is a part of the program of the Federal Aviation Agency to recodify its regulatory material into a new series of regulations called the ''Federal Aviation Regulations'' to replace the present ''Civil Air Regulations'' and ''Regulations of the Administrator''.

During the life of the recodification project, Chapter I of Title 14 may contain more than one part bearing the same number. To differentiate between the two, the recodified parts, such as the ones in this subchapter, will be labeled ''[New]''. The label will of course be dropped at the completion of the project as all of the regulations will be new.

Subchapter D [New] was published as a notice of proposed rule making in the *Federal Register* on May 2, 1962 (27 FR 4175) and as Draft Release 62–20.

Some of the comments received recommended specific substantive changes to the regulations. Although some of the recommendations might, upon further study, appear to be meritorious, they cannot be adopted as a part of the recodification program. The purpose of the program is simply to streamline and clarify present regulatory language and to delete obsolete or redundant provisions. To attempt substantive changes in the recodification of these regulations (other than minor, relaxatory ones that are completely noncontroversial) would delay the project and would be contrary to the ground rules specified for it in the *Federal Register* on November 15, 1961 (26 FR 10698) and Draft Release 62–20. However, all comments of this nature will be preserved and considered in any later substantive revision of the affected parts.

Certain changes, not contained in Draft Release 62–20, reflect amendments, to the parts revised herein, that became effective after the Draft Release was published. Each of these amendments, when published, contained a statement that they would be included in the final draft of the recodified parts affected and, in addition, Draft Release 62–20, stated that such amendments would be included in the final draft of the revised subchapter. See amendments 20–15, 20–16, 20–17, 21–3, 22–13, 22–14, 24–4, and 24–5.

Draft Release 62–14, dated April 2, 1962, proposed certain amendments to provisions of part 20 of the Civil Air Regulations under which former military pilots may obtain private and commercial pilot certificates on the basis of military competence. The period for receiving comments on the proposal having closed on June 7, 1962, and no adverse comments having been received thereon, these amendments are incorporated into § 61.31 of the revised subchapter.

Other minor changes of a technical clarifying nature or relaxatory nature have been made. They are not substantive and do not impose any burden on regulated persons. For example, the unnecessary provision, contained in CAR 21.23, that an airline transport pilot must present his pilot certificate for inspection by any person, has been deleted in the light of other existing requirements that such a pilot must present his certificate for inspection upon the request of the Administrator, an authorized representative of the CAB, any State or local law enforcement officer, or any passenger.

Draft Release 62–27 dated June 8, 1962 (27 FR 5686) contained a notice of the revision of the procedural rules of the Federal Aviation Agency. The preamble to the release stated that the certification procedural rules in part 406 of the Regulations of the Administrator were being considered for transfer to the parts to which they specifically applied, insofar as they did not duplicate provisions already in those parts. For this reason, a new subpart B, relating to procedures for medical certificates, has been added to part 67 ''Medical Standards and Certification'' [New]. The subpart is a revision, without substantive changes, of medical certification provisions now in part 406.

Of the comments received on Draft Release 62–20, several suggested changes in style, format, or technical wording. These comments have been carefully considered and, where consistent with the style, format, and terminology of the recodification project, were adopted.

The definitions, abbreviations, and rules of construction contained in part 1 [New] of the Federal Aviation Regulations apply to the new Subchapter D.

Interested persons have been afforded an opportunity to participate in the making of this regulation, and due consideration has been given to all relevant matter presented. The Agency appreciates the cooperative spirit in which the public's comments were submitted.

In consideration of the foregoing Chapter I of Title 14 of the Code of Federal Regulations is amended effective November 1, 1962.

This amendment is made under the authority of sections 313(a), 314, 601, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, and 1427).

Amendment 67–1

Cheating on Tests and Other Irregularities

Adopted: February 11, 1965 **Effective: March 20, 1965**

(Published in 30 FR 2195, February 18, 1965)

The purpose of these amendments is to prohibit cheating or certain other unauthorized conduct in connection with FAA written airman or ground instructor tests; fraudulent or intentionally false applications for airman, ground instructor, or medical certificates or ratings, or entries in logbooks, records, or reports required in connection with these certificates or ratings; and alteration, or fraudulent reproduction of these certificates or ratings. This action was proposed in Notice No. 64–20 (29 FR 4919) issued April 1, 1964. As proposed, it applies to not only the airman regulations but also the regulations covering medical certification and ground instructors.

A number of comments were received on Notice No. 64–20, most of them generally favorable to the proposed amendments. Three comments opposed as too harsh the provision that the commission of a prohibited act is a basis for suspending or revoking an existing certificate or rating held by the violator. A major purpose for this provision is the deterrent effect of the enunciation of a strong available penalty. Thus, the provision is especially significant with respect to a person who assists another in the violation, for example by taking a test for him. In such a case, it is no deterrent to the former (who usually is obtained because he already holds the certificate the latter is seeking) merely to warn him that the principal penalty for taking a test in behalf of another person is that he will not be eligible, for a year thereafter, for any airman, ground instructor, or medical certificate or rating, as the case may be. The most effective deterrent in this situation would be the possibility of loss of one or all of the certificates he already possesses.

The one-year ineligibility for a certificate or rating is automatic in the case of cheating or other unauthorized conduct in connection with written tests. However, as indicated by Notice No. 64–20, the fact that suspension and revocation of certificates or ratings are made available in these regulations does not mean they must be imposed in every case or automatically upon every violator. The same degree of discretion and the same criteria for the imposition of these sanctions will be exercised by the Agency officials responsible for taking enforcement action in this area as in all other areas where penalties are provided for violation of regulations. Furthermore, the sanctions made available by these amendments do not preclude the imposition, in case of violation, of civil penalties under section 901 of the Federal Aviation Act of 1958 (49 U.S.C. 1471), either alone or in conjunction with these sanctions.

Comments also were received urging that acts to be prohibited by these amendments should be done ''knowingly,'' or ''willfully,'' or ''knowingly or willfully,'' to incur the sanctions provided. It of course is not the design of these amendments to prohibit acts that might likely be committed inadvertently. Accordingly, these amendments make clear that intention is an element of those prohibited acts that otherwise might likely be committed inadvertently, namely, the removal of a written test, or a false statement on an application for a certificate or rating or in a logbook, record, or required report. Also, responsive to several comments and reflecting the original intention as to reproductions of certificates or ratings, the prohibition has been restated to refer to reproduction for fraudulent purpose. Furthermore, the reference in Notice No. 64–20 to authorization by the Administrator in this connection has been dropped in these amendments, since only fraudulent reproductions are prohibited, and since new documents are issued where appropriate, thus obviating any need for authorizing alterations.

Interested persons have been afforded an opportunity to participate in the making of these amendments, and due consideration has been given to all matter presented.

In consideration of the foregoing, part 67 of the Federal Aviation Regulations is amended effective March 20, 1965.

These amendments are made under the authority of sections, 313(a), 601, 602, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1421, 1422, 1427).

Amendment 67–2

Special Medical Flight or Practical Test or Medical Evaluation for Special Issue of Medical Certificate

Adopted: September 14, 1965 **Effective: October 21, 1965**

(Published in 30 FR 12025, September 21, 1965)

The purpose of these amendments is to make clear that the Federal Air Surgeon has authority (1) to decide whether a special medical flight or practical test, or special medical evaluation, should be conducted or the applicant's operational experience considered under § 67.19 of part 67 of the Federal Aviation Regulations, and, if so, (2) to prescribe which of these procedures should be used, in the determination of whether a medical certificate should be issued to an applicant who does not meet the applicable medical standards of that part. This action was proposed in Notice 65–10 (30 FR 6188) issued April 23, 1965.

Ten comments were received on Notice 65–10. Six were favorable and three unfavorable to the proposed amendments, and one was nonresponsive. Two of the unfavorable comments expressed concern that the amended rule would vest too much increased authority in the Federal Air Surgeon. The language contained in the proposal merely clarified the provisions of the existing rules and did not vest any increased authority in the Federal Air Surgeon. In this connection, one of these comments also asserted there would be nothing to ensure equal treatment of all applicants with the same defect. It should be noted that the objective of § 67.19 is to provide for the issue of a medical certificate to an applicant who does not meet the medical standards as prescribed in part 67. In order to achieve that objective in the consideration of the various types of medical deficiencies involved, the Federal Air Surgeon must be given the discretion to conduct the type of test or other procedure that he believes appropriate to determine whether the applicant can properly perform his duties as an airman.

One of these two comments on the proposal further suggested that any rule finally adopted should provide that if the medical defect is static the applicant should be entitled to an opportunity to take a special medical flight test. If adopted, this not only would make mandatory resort to a special procedure in one type of situation, but it also would prescribe the particular special procedure to be used. As stated in the preamble of Notice 65–10, situations arise in which the Federal Air Surgeon may determine that the applicant could not satisfactorily show, by any of the available special procedures, ability to perform the duties of an airman certificate without endangering safety in air commerce. In such a case, the resort to any of these procedures would not be purposeful, and the Federal Air Surgeon should have authority under § 67.19 to refuse their use. Also as stated in that preamble, where the Federal Air Surgeon does prescribe special medical flight or practical testing or special medical evaluation under § 67.19, the selection of the particular procedure to be used, of those named, essentially is an element of his medical determination whether the applicant can properly perform his duties as an airman despite his physical deficiency. This selection should repose in the Federal Air Surgeon because of his special qualifications and facilities available to him to obtain and assess medical information about an applicant's total medical status. Accordingly, it would defeat the objective of § 67.19 to provide for automatic entitlement to a designated procedure in any particular type of situation.

One of the favorable comments would make mandatory the consideration by the Federal Air Surgeon of an applicant's operational experience under § 67.19. Conversely, another comment expressed the belief that the applicant's operational experience is not germane to the evaluation of an airman's physical qualifications to hold a medical certificate. The medical requirements of the former part 29 of the CARs were amended, many years ago, to permit an evaluation of the applicant's aeronautical experience regardless of the type of airman certificate or rating sought or held by the applicant. The Agency has pursued this policy as applied by the Federal Air Surgeon, and the last sentence of § 67.19(a)(1) of the proposal expressed the intent of the Agency to continue this policy. To limit the discretionary authority of the Federal Air Surgeon in those cases by prohibiting any consideration by him of the applicant's operational experience, or making such consideration mandatory in all cases, regardless of the type of deficiency involved, would like the adoption of the suggestion on static defects, also defeat the objective of § 67.19.

Interested persons have been afforded an opportunity to participate in the making of these amendments to § 67.19, and due consideration has been given to all matter presented.

These amendments also substitute the term ''Federal Air Surgeon'' for the term ''Civil Air Surgeon'' throughout part 67, to state the correct current title of this official of the Agency. They also change the numbering of § 67.15(e) to conform with the parallel provisions of §§ 67.13(e) and 67.17(e), in order to preclude the continuation of some current confusion and technical mistakes in referring to these provisions.

Since these latter two changes are purely editorial in nature, notice and public procedure thereon are unnecessary.

In consideration of the foregoing, part 67 of the Federal Aviation Regulations is amended effective October 21, 1965.

These amendments are made under the authority of sections 313(a), 314, 601, and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1355, 1421, 1422).

Amendment 67–3

Distant Visual Acuity: First- and Second-Class Medical Certificates

Adopted: November 16, 1965 **Effective: November 23, 1965**

(Published in 30 FR 14562, November 23, 1965)

The purpose of these amendments is to change the distant visual acuity requirement for an applicant for a first- or second-class medical certificate from at least 20/50 to 20/100 in each eye separately before correction. This action was proposed in Notice 65–22 (30 FR 11732) issued September 7, 1965. All comments received on the proposal were favorable.

The present standard in §§ 67.13(b)(1) and 67.15(b)(1) of part 67 of the Federal Aviation Regulations requires an applicant for a first- or second-class medical certificate, respectively, to have distant visual acuity of at least 20/50 in each eye separately, before correction to 20/20 or better with corrective glasses. As stated in the preamble of Notice 65–22, this standard has been in effect unchanged since 1938, despite later significant technological advances in design and performances of aircraft, and in the environment in which they are operated. Also, as stated in that preamble, applicants with uncorrected distant visual acuity less than specified in the present standard, except those with gross myopic conditions, generally have been allowed to show under § 67.19 whether they have been able to operate aircraft without endangering safety in air commerce despite the disqualification. If they have not had other major disturbances in visual functions, they almost invariably have been able to demonstrate favorably, and they have received special issue of medical certificates on an individual basis. This process has required special detailed evaluations of all aspects of their vision, and has been expensive to applicants, both in money expended for ophthalmological examinations, and in issuance delay time, and it also has entailed considerable time and effort on the part of the Agency.

Accordingly, the accompanying amendments accommodate the distant visual acuity standard for first- and second-class medical certificates to current conditions, and dispense with special testing that in the great majority of cases would result in the special issue of a certificate anyway, without adverse effect upon safety.

Interested persons have been afforded an opportunity to participate in the making of these amendments, and due consideration has been given to all matter presented.

Since these amendments are relaxatory in nature and impose no burden upon any person, good cause exists for making them effective on less than 30 days published notice.

In consideration of the foregoing, part 67 of the Federal Aviation Regulations is amended effective November 23, 1965.

These amendments are made under the authority of section 313(a), 601, and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1421, and 1422).

Amendment 67–4

Special Issue of Medical Certificates for Air Traffic Control Tower Operators

Adopted: March 25, 1966 **Effective: March 31, 1966**

(Published in 31 FR 5190, March 31, 1966)

The purpose of this amendment is to remove the limitations contained in § 67.19(d) of the Federal Aviation Regulations, relating to special issuance of a medical certificate, so far as those limitations relate to air traffic tower operators.

Medical certification is now required of all airmen who perform their duties aloft, such as pilots, navigators and flight engineers. Only one class of airmen that perform duties on the ground are required to hold medical certificates—air traffic controllers. Air traffic controllers must hold a second class medical certificate, the same as required of commercial pilots. Private and student pilots, for example, hold only need a third class medical certificate.

Obviously there are great differences in the ground and flight environments in which these different airmen function. A pilot often is alone in the air and must at all times possess not only the technical, but also the physical capacity to act. Even in multi-engine aircraft, where crewmembers perform more specialized duties, the sudden physical incapacity of one can affect the overall crew operation to the extent that aircraft safety is seriously endangered. In general, the air traffic controller is under close supervision with back-up personnel close at hand, capable of performing his functions in the event he is physically disabled. Physical disabilities that may be under the applicable medical standards of part 67 disqualifying to a flight airman may be tolerated under controlled conditions, in a ground based airman. With these considerations in mind, and with the initiation of the new medical program described below, it is now possible for the Agency to establish a system for issuing waivers, under those controlled conditions, for certain physical defects in ground airmen.

The Federal Aviation Agency has established a health program for applicants and holders of FAA air traffic control specialist field facility positions oriented to the particular job and functional requirements of an air traffic control operator. The program includes the use of diagnostic techniques not required for a second class medical examination under this part, and provides for professional referrals, consultations, and follow-up examinations as necessary. The program provides that full regard shall be given to the practical requirements of the position. If the employee can be utilized with safety, apparently disqualifying defects or diseases may be waived.

Paragraph 67.19(d) removes from the scope of a special issuance of a medical certificate certain disorders and diseases that are disqualifying without further consideration. In view of the thorough annual examination being required of each FAA air traffic control specialist by the Agency described above, and an evaluation of the physical standards required for air traffic control positions occupied by FAA employees, the Federal Air Surgeon is in a position to determine whether an employee's disease or defect would disqualify him for the position the employee applies for or holds. The comprehensive health program and a more flexible standard for physical disqualification will permit the Agency to utilize trained and experienced employees with no derogation of safety.

There are additionally a group of control tower operators, employed in military or privately operated control towers, who may benefit from the special issuance of medical certificates provided by this amendment. In view of the small number of persons involved, the Federal Air Surgeon can review the special issuance of these control tower operator medical certificates without an undue burden added.

Since this amendment is procedural in nature and results in providing all certificated air traffic control tower operators an additional benefit, notice and public procedure thereon are not required and this amendment may be made effective in less than 30 days after publication.

In consideration of the foregoing, section 67.19(d) is amended and effective March 31, 1966.

This amendment is made under the authority of sections 307, 313(a) and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, 1422).

Amendment 67–5

Delegations of Authority to Reconsider Certification Actions; Denials by Representatives of the Federal Air Surgeon Within FAA; and Failure to Furnish Additional Medical Information

Adopted: June 9, 1966 **Effective: July 16, 1966**

(Published in 31 FR 8355, June 15, 1966)

The purpose of these amendments to part 67 of the Federal Aviation Regulations is (1) to provide authorization for certain representatives of the Federal Air Surgeon within the Agency (the Chief, Aeromedical Certification Branch, Civil Aeromedical Institute, and Regional Flight Surgeons) to finally reconsider issuances and denials of medical certificates by aviation medical examiners, in certain situations; (2) to provide that a denial by such a representative in any of those situations is considered to be a denial by the Administrator for the purpose of review by the Civil Aeronautics Board; (3) to require the surrender, upon request, of a medical certificate whose issue is reversed, wholly or in part, upon

reconsideration by the Federal Air Surgeon or such a representative; and (4) to state in the regulations that if an applicant for, or holder of, a medical certificate refuses to furnish additional medical information the Administrator may suspend, modify, or revoke a certificate, or refuse to issue it. Except for the scope of the first and second items mentioned, that is now made narrower than originally contemplated, these amendments were proposed in Notice 65–41 issued December 16, 1965 (30 FR 16084), for which the comment period was extended to March 23, 1966 by Notice 65–41A issued February 2, 1966 (31 FR 1312).

A number of the comments received on Notice 65–41 concurred in the proposals made. One of these comments (as well as several others that did not concur) displayed apprehension that delegation of authority to representatives of the Federal Air Surgeon to ''finally reconsider'' actions of aviation medical examiners would eliminate an applicant's recourse to petition for exemption from the rules. This apprehension is not well grounded, for Notice 65–41 is not concerned with the exemption procedure in any respect, either explicitly or implicitly. Both the Notice and these amendments are concerned only with the administration of the rules in part 67, not with the grant or denial of exemptions issued in accordance with rules specifically provided in the rule-making procedures of part 11.

Some comments presented strong objections to the proposed delegation of authority to representatives of the Federal Air Surgeon within the Agency. One comment concurred in the proposal so far as it would apply to cases where the Federal Air Surgeon does not have authority in any event to consider special issue of medical certificates (cases excluded from (§ 67.19). It was asserted that the proposed amendments would improperly tend to shift the Federal Air Surgeon's authority to make important decisions in the medical certification area to Regional Flight Surgeons; abrogate the denial authority of the Federal Air Surgeon; and result in a lack of uniformity in the application of medical standards. The first and second assertions display needless apprehension, since the proposals would not affect the general policy making responsibility of the Federal Air Surgeon, and the delegation to his representatives would not deprive him of his own authority in the area.

The assertion that a lack of uniformity might result, in the application of medical standards in the certification process, has pointed out an item susceptible of controversy, with strong arguments on each side. As stated in Notice 65–41, the proposal was in keeping with the Agency's policy of decentralization, and would foster a lessening of the delays incident to geographic distances and needless duplication of activity. However, it is recognized that the assertion may have merit, in this highly specialized field of medicine where various individuals may conceivably have different interpretations of a given set of medical facts.

After careful consideration of all issues involved, the Agency has concluded that, in view of this argument against the proposed change, it is doubtful that the action would preserve the maintenance of uniformity in the application of medical standards, and its adoption in full is inappropriate at this time. Therefore, the Agency has dropped this proposed change so far as it pertains to cases in which the Federal Air Surgeon has authority under part 67 to override a denial of a medical certificate. However, in certain areas listed in § 67.19(d), the regulations do not allow the Federal Air Surgeon to issue medical certificates specially to applicants with established inability to meet the applicable medical standards. In these areas the Federal Air Surgeon has no alternative but to confirm the denial action of his representatives, although he of course provides guide-lines to aviation medical examiners for the application of the medical standards in all cases. The areas involve established medical history or clinical diagnosis of: (1) myocardial infarction, or angina pectoris or other evidence of coronary heart disease that the Federal Air Surgeon finds may reasonably be expected to lead to myocardial infarction; (2) a character or behavior disorder that is severe enough to have repeatedly manifested itself by overt acts, a psychotic disorder, chronic alcoholism, drug addiction, epilepsy, or a disturbance of consciousness without satisfactory medical explanation of the cause; and (3) diabetes mellitus that requires insulin or any other hypoglycemic drug for control. In 1964, approximately 919 and in 1965 approximately 962 cases were referred to the Federal Air Surgeon for further review. Of these, 350 cases in 1964 and 316 cases in 1965, or about one-third of all of the cases so referred. Involved denials of medical certificates in the areas described, and the Federal Air Surgeon routinely affirmed the denials, as required. The delegation of final Agency denial authority to representatives in these cases will spare the applicants, as well as the government, great expense and useless effort. These amendments therefore adopt the proposal made in Notice 65–41, to the extent indicated, and as a result greater and faster service will be provided to applicants. After an opportunity to evaluate operational experience under this limited delegation of authority, the Administrator may later delegate full authority to his representative at the Aeromedical Certification Branch, Oklahoma City, to finally reconsider all issuances and denials of medical certificates by aviation medical examiners.

It should be noted, in connection with this limited delegation of authority, that the Federal Air Surgeon and his representatives within the Agency not only retain authority to finally reconsider denials

of medical certificates except in the situations listed above, but also have authority upon their own initiative to reconsider issuances of medical certificates by aviation medical examiners. In this manner, cases involving novel or important features may be inquired into by the highest medical authority of the Agency, even where certificates have been issued, as contemplated by subsection 314(b) of the Federal Aviation Act of 1958.

One comment asserted that any attempt by the Agency to reverse the issue of a medical certificate by an aviation medical examiner, without compliance with section 609 of the Federal Aviation Act of 1958, would be invalid, as well undesirable. Several other comments also pointed out that the burden of proof is the Administrator's under section 609, whereas this burden is the applicant's under section 602 of the Act. Sub-section 314(b) of the Act empowers the Administrator to ''reconsider'' either the denial or issuance of a medical certificate by an aviation medical examiner. It is the Agency's position that when the Administrator exercises that power to correct an error committed by a private person in the exercise of delegated authority (where the aviation medical examiner should have taken a different course of action based upon the information available to him when he issued the medical certificate) the airman must rely upon his rights under section 602 of the Act if he is dissatisfied. In such a case, a ''reexamination'' under section 609 of the Act is not necessary. The position of the Agency is clarified in these amendments by adding a provision in § 67.25(b) that any action taken by the Federal Air Surgeon or his authorized representative within the Agency under subsection 314(b) of the Act that reverses, wholly or in part, the issue of a medical certificate by an aviation medical examiner is the denial of a certificate by the Administrator under section 602 of the Act.

The proposal to require surrender, upon request, of a medical certificate whose issue is reversed or otherwise changed, upon reconsideration, was generally supported by the comments received. Two comments expressed concern that this would permit arbitrary deprival of a certificate legally issue. However, as stated in Notice 65–41, the obligation is imposed with respect to a certificate that has been found to have been issued to an applicant who in fact does not meet the applicable standards, and the Agency considers this a reasonable requirement in order to protect against the use of the certificate.

In each of these reconsideration provisions, the action taken by the Federal Air Surgeon or his representative within the Agency is described as one to ''wholly or partly reverse'' the issue of the medical certificate. This language is used in order to make clear that the provisions concern action taken that is adverse to the applicant. It would be clearly unreasonable to provide that action taken upon reconsideration that is advantageous to the applicant is the denial of a medical certificate.

Most of the comments received were not opposed to the proposal to require the applicant or certificate holder to furnish additional medical information. Some comments asserted this authority could be exercised improperly to delve into irrelevant matters. However, as is plain from the provision, the purpose is to obtain additional medical information needed to determine whether an applicant is eligible to hold a medical certificate.

Interested persons have been afforded an opportunity to participate in the making of these amendments, and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, and for the reasons stated in Notice 65–41, part 67 of the Federal Aviation Regulations is amended effective July 16, 1966.

These amendments are made under the authority of sections 303(d), 313(a), 314(b), 601, 602, and 609 of the Federal Aviation Act of 1958 (49 U.S.C. 1344, 1354, 1355(b), 1421, 1422, 1429).

Amendment 67–6

Special Issue of Medical Certificates by Chief, Aeromedical Certification Branch, and Regional Flight Surgeons

Adopted: June 17, 1968 **Effective: June 22, 1968**

(Published in 33 FR 9253, June 22, 1968)

The purpose of this amendment to part 67 of the Federal Aviation Regulations is to disclose for the guidance of the public the officials making the determinations required under § 67.19 for the issue of a medical certificate to an applicant who does not meet the applicable medical standards.

Section 67.19 provides for the issue of a medical certificate of the appropriate class to an applicant who does not meet the medical standards of part 67 (other than certain specified requirements). Under

the provisions of that section the Federal Air Surgeon determines whether special medical testing or evaluation should be conducted to issue a medical certificate with appropriate limitations to an applicant. This amendment shows that the Chief, Aeromedical Certification Branch, Civil Aeromedical Institute, and Regional Flight Surgeons will now have the same authority.

Since this amendment is procedural in nature, notice and public procedure thereon are not required and it may be made effective in less than 30 days after publication.

In consideration of the foregoing, § 67.19 of the Federal Aviation Regulations is amended effective June 22, 1968.

This amendment is made under the authority of sections 303(d), 313(a), 601, and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1344, 1354, 1421, 1422).

Amendment 67–7

Reconsideration of Certification Actions

Adopted: January 2, 1969 **Effective: February 8, 1969**

(Published in 34 FR 248, January 8, 1969)

The purpose of this amendment to part 67 of the Federal Aviation Regulations is to provide that certain FAA officials may on their own initiative reverse the issuance of a medical certificate by an aviation medical examiner, within 60 days after receiving additional medical information establishing the noneligibility of the holder of that certificate, when that information was requested within 60 days of issuance.

This amendment was proposed in Notice 68–14, and published in the *Federal Register* on July 10, 1968 (38 FR 9005).

Four public comments were received on the Notice, three of which concurred in the proposal or offered no objections. One comment objected to the proposal, asserting that it would be unfair to keep the airman in a state of suspense for any longer period of time because of FAA ''inefficiencies''. However, this comment failed to recognize that in many cases the need for more time stems from delays of the airman in providing needed medical information to establish his eligibility or noneligibility for a medical certificate. As stated in the Notice, § 67.25(b), as amended by Amendment 67–5, effective July 16, 1966, contains a 60-day time limitation within which FAA officials may reconsider and reverse the issuance of a medical certificate by an aviation medical examiner. However, although the reconsideration may indicate the need for additional medical information to determine whether an error was made by an aviation medical examiner, the authority of the FAA official to fully reconsider the case and reverse the issuance of the certificate, if necessary, could be effectively defeated by the failure (or delay) of the holder of the medical certificate to respond to the request for additional medical information within 60 days from the date the certificate was issued. This could allow operation of aircraft by airmen whose physical qualifications have not been fully determined, and, if necessary, require resort to action under section 609 of the Federal Aviation Act to prevent the airman from further operation of an aircraft until a determination can be made that he can do so safely.

Since the term ''medical information'' as used in § 67.31—Medical Records (under which information is requested) includes the results of ''medical testing'', the latter term is not used in the amended rule although it was used in the Notice. Also, the amendatory language has been rearranged for the purpose of clarification, but without change in meaning.

In consideration of the foregoing, part 67 of the Federal Aviation Regulations is amended effective February 8, 1969.

This amendment is issued under the authority of sections 303(d), 313(a), 601, and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1344, 1354(a), 1421, 1422) and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Amendment 67–8

Changes in References to FAA Regulations, Position Title, and Certain Addresses

Adopted: August 27, 1970 **Effective: September 4, 1970**

(Published in 35 FR 14074, September 4, 1970)

The purpose of these amendments to parts 61, 63, 65, 67, 141, and 143 of the Federal Aviation Regulations is to reflect in parts 65 and 141 appropriate references to part 430 of the Regulations of the National Transportation Safety Board; reflect in part 67 an organizational change in the title of the FAA Assistant Administrator to FAA Regional Director; and update several references in the Regulations to the addresses to which applications for replacement of lost or destroyed certificates and certain other communications with the FAA are sent. These amendments also correct an inadvertent error made in a recent amendment to part 65.

On April 1, 1967, the aviation safety functions of the Civil Aeronautics Board under Titles VI and VII of the Federal Aviation Act of 1958 were transferred to the National Transportation Safety Board (49 U.S.C. 1651 *et seq.*). Thereafter the Board issued part 430 of its Regulations pertaining to aircraft accidents, incidents, overdue aircraft, and safety investigations, effective November 10, 1969 (34 FR 15749). These amendments accordingly change the references in parts 65 and 141 to part 430 of the Regulations of the National Transportation Safety Board instead of to part 320 of the Regulations of the Civil Aeronautics Board.

The organizational title of FAA Assistant Administrator has been changed to FAA Regional Director, and this change is reflected in the amendments to part 67.

The addition of ''Department of Transportation'' and box numbers and zip codes to addresses found in parts 61, 63, 65, 67, and 143 serve to clarify and modernize mailing addresses to which applications for lost or destroyed certificates and certain other communications with the FAA are sent.

In Notice 70–12 (35 FR 4862) it was proposed that an air traffic control operator should not be authorized to issue air traffic control clearances for IFR flight without authorization from the appropriate air route traffic control center. In issuing Amendment 65–15 pursuant thereto (35 FR 12326) it was stated that a tower may be under the jurisdiction of some facility other than an air route traffic control center, and that therefore the general phrase of reference ''facility exercising IFR control'' would be used. However, in the amended § 65.45(b) the phrase ''air traffic control'' was inadvertently used instead of ''IFR control.'' These amendments correct that inadvertence by replacing ''air traffic control'' with ''IFR control.''

Notice and public procedure hereon are not required since these amendments merely reflect changes of law and procedures as well as the correction of an inadvertent clerical error, and they may therefore be made effective in less than 30 days.

In consideration of the foregoing, parts 61, 63, 65, 67, 141 and 143 of the Federal Aviation Regulations are amended effective September 4, 1970.

(Sections 313(a), 602, 608 of the Federal Aviation Act of 1958; 49 U.S.C. 1354(a), 1422, 1428. Section 6(c) of the Department of Transportation Act; 49 U.S.C. 1655(c)).

NOTE: Corrections to position title in section 67.23(a) and (b) are incorporated in the original printing of this basic volume.

Amendment 67–9

Revised Terminology and Separation of Disqualifying Mental and Neurologic Conditions

Adopted: February 14, 1972 **Effective: April 26, 1972**

(Published in 37 FR 4071, February 26, 1972)

The purpose of these amendments to part 67 of the Federal Aviation Regulations is (1) to revise the terminology used to denote mental and neurologic conditions that disqualify applicants for medical certificate, to conform with current usage in the medical profession: and (2) to separate what have been termed ''nervous system'' conditions into mental and neurologic disorders as two distinct groups of disqualifying conditions.

Interested persons have been afforded an opportunity to participate in the making of these amendments by a notice of proposed rule making (Notice 71–30) issued on September 28, 1971, and published in the *Federal Register* on October 5, 1971 (36 FR 19396). Due consideration has been given to all comments presented in response to that Notice.

Two public comments were received in response to the Notice. Each was from an aviation trade association, and each concurred in the proposed amendments.

As stated in the Notice, a disparity has existed between the terminology used in the standards involving mental disorders and currently accepted psychiatric terminology. As a result, difficulty has existed in applying the latter terminology to these mental disabilities although the basic definitions have remained essentially unchanged. To avoid the recurrence of these difficulties, particularly in enforcement actions, and to update the regulations, these amendments revise the terminology describing the mental requirements, as proposed in the Notice, to conform with the terminology generally used by specialists in that branch of medicine as contained in the Manual published by the American Psychiatric Association, ''Diagnostic and Statistical Manual of Mental Disorders (second edition 1968).'' It is intended that use of that terminology will reduce confusion and ambiguity in the use and application of psychiatric terms by enumerating and defining disqualifying mental disorders in conformity with the terminology used in the current practice of psychiatry.

The proposed changes were reviewed and approved by a committee of the American Psychiatric Association, and that committee indicated that the changes may be considered essentially semantic.

Additionally, as proposed, these amendments separate ''mental condition'' and ''neurologic condition'' under the appropriate sections of part 67 to clarify the applicable standards, as well as to recognize a division in professional specialization in disorders of a mental or neurologic nature. It is anticipated that this separation will also facilitate the gathering and analysis of statistical information relating to airman applicants who have been issued or denied medical certificates where mental or neurologic histories or conditions are concerned. As the neurologic terminology previously used in acceptable, no change is made in the enumeration of disqualifying neurologic disorders.

In consideration of the foregoing, part 67 of the Federal Aviation Regulations is amended effective April 26, 1972.

(Sections 313(a), 601, and 602 of the Federal Aviation Act of 1958; 49 U.S.C. 1354(a), 1421, 1422. Section 6(c) of the Department of Transportation Act; 49 U.S.C. 1655(c)).

Amendment 67–10

Visual Acuity Requirements for Medical Certificates; Use of Contact Lenses

Adopted: October 12, 1976 **Effective: December 21, 1976**

(Published in 41 FR 46432, October 21, 1976)

The purpose of this amendment to part 67 of the Federal Aviation Regulations is to permit the use of contact lenses (as well as eye glasses) to satisfy the distant visual acuity requirement of part 67.

Interested persons have been afforded an opportunity to participate in the making of this amendment by a Notice of Proposed Rulemaking (Notice No. 75–33) issued on September 2, 1975, and published in the *Federal Register* on September 10, 1975, (40 FR 42024). Due consideration has been given to all comments received in response to that Notice.

Notice No. 75–33 was issued in response to a petition for rulemaking submitted by the Aircraft Owners and Pilots Association (AOPA) by letter dated March 8, 1974. AOPA petitioned for amendment of the medical standards of part 67, specifically to authorize the use of contact lenses for meeting visual requirements for all classes of airman medical certificates. In support of its petition, AOPA contented that experience shows that the use of contact lenses produces no sudden unpredictable hazards to flight, and that once in place, a contact lens is not easily dislodged. AOPA also pointed out that in some situations contact lenses are superior to glasses because they do not obstruct the peripheral visual field as do spectacle frames, and further that contact-lens use in more compatible with the wearing of certain protective equipment.

The FAA has recognized the increasing popularity and use of contact lenses in the United States, and certain advantages of these lenses over spectacles. While the medical standards of part 67 of the

Federal Aviation Regulations specifically provide that acceptable vision correction shall be achieved through the use of glasses, Statements of Demonstrated Ability (special issuances) have been issued to applicants pursuant to § 67.19 of the Federal Aviation Regulations, permitting the use of contact lenses to correct distant visual acuity. Contact lenses that correct near visual acuity have not been considered acceptable for aviation duties. To date, these special issuances have been granted only upon submission of detailed reports by eye specialists and after review of these reports by FAA medical personnel. This administrative procedure has frequently delayed the initial medical certification of applicants who wish to wear contact lenses to meet distant visual acuity standards.

As pointed out in Notice 75–33, FAA experience indicates that, these evaluation reports have had limited value in uncovering significant pathology or evidence of complications that would contradict the use of contact lenses in the performance of aviation duties. In addition, the agency is unaware of any accidents or incidents in which the use of contact lenses by airmen was a contributing factor.

One hundred thirty-seven comments were received in response to this proposal. Most of the comments received were favorable, five expressed no opinion, and one opposed the proposed amendment. The comment in opposition to the proposal stated that the possibility of dislodgement of lenses might adversely affect safety.

Several commentators suggested that contact lens wearers be required to carry ''backup'' glasses to replace their contact lenses in the event the lenses are dislodged during operation of an aircraft.

In developing Notice No. 75–33 the FAA considered requiring contact lens wearers to carry an extra pair of contact lenses or glasses while performing airman duties. The FAA concluded, however, that the likelihood of losing one or both lenses during flight was not of sufficient magnitude to warrant such a requirement. Moreover, it was noted that should an individual lose one lens and attempt to improve vision with ''backup'' glasses, he would most likely have to remove the remaining lens and that under any circumstances, corneal molding from the lens would not permit full interchange of lenses and glasses. Furthermore, if a lens was lost during a critical phase of flight, there would be no opportunity to replace the lens with a ''backup'' contact lens and the airman might be better off under those circumstances with only one lens in place.

The FAA has determined that the question of whether the airman should routinely carry a spare set of lenses (contact lenses or glasses), may be left to the individual without adversely affecting aviation safety. It should be noted that present regulations do not require ''backup'' glasses when glasses are needed to meet the visual acuity standards, even though glasses may be misplaced or dropped, just as with contact lenses. There has been no indication that the absence of such a requirement has in any way compromised safety.

Additionally, several commentators stated that effects of corneal molding from wearing contact lenses may create difficulties in assessing an applicant's uncorrected distant visual acuity at the time of examination. The commentators pointed out that such circumstances could interfere with the appropriate application of existing visual acuity standards that require applicants for first- and second-class medical certificates to have distant visual acuity of at least 20/100 in each eye separately, without correction.

The FAA believes that this potential problem does not require regulatory action at this time. Designated Aviation Medical Examiners will be provided guidelines for the evaluation and testing of applicants who wear contact lenses.

An applicant whose uncorrected visual actuity is substantially affected by recent use of contact lenses will be advised not to wear the lenses for a period of time and then will be re-examined.

The FAA believes that the use of contact lenses to correct distant visual acuity will not adversely affect safety, and that the administrative delay experienced by applicants by obtaining special issuances under § 67.19 will be avoided by amending part 67 to permit the use of contact lenses as well as eye glasses.

These amendments are made under the authority of sections 313(a), 601 and 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1421, and 1422) and section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

In consideration of the foregoing, §§ 67.13(b)(1), 67.15(b)(1) and 67.17(b)(1) of part 67 of the Federal Aviation Regulations are amended effective December 21, 1976.

Amendment 67–11

Special Issuance of Airman Medical Certificates and Revision of Cardiovascular and Alcoholism Standards

Adopted: February 8, 1982 **Effective: May 17, 1982**

(Published in 47 FR 16298, April 15, 1982)

SUMMARY: This amendment revises the special discretionary procedures for issuing airman medical certificates to persons who do not qualify for certification under §§ 67.13, 67.15, or 67.17 of the Federal Aviation Regulations. These procedures will now be available to individuals with certain medical conditions who previously had to seek a formal exemption from the regulations. It makes available a simpler administrative procedure that is expected to reduce the time applicants must wait for a decision. The revised rule also emphasizes that in making medical certification decisions for these individuals the FAA considers the right of the private pilot to accept greater risk to self than the commercial or airline transport pilot may accept, as long as safety for others in air commerce is not endangered.

In compliance with Executive Order 12291, Federal Regulation, the FAA intends to conduct a complete review of the FAA's medical standards. In the interim, this amendment also clarifies the medical standards in §§ 67.13, 67.15, and 67.17 for applicants with a medical history or clinical diagnosis of heart disease. Although the pending review of all the medical standards in part 67 could result in significant changes to that part, this interim clarification is needed to eliminate confusion about the standards that has resulted in quasijudicial decisions directing the certification of individuals who are subject to the incapacitating health effects of heart disease. These decisions have required issuance of certificates without the monitoring which is needed to assess risk to the safe operation of aircraft and to other persons in the air and on the ground. Individuals who are disqualified under these standards may be certificated, where appropriate, through the discretionary special issuance procedures by which adequate monitoring and other appropriate limitations may be imposed.

The amendment also revises the standard for the certification of individuals with a medical history or clinical diagnosis of alcoholism, to qualify individuals who provide evidence of adequately restored health. This relief has previously been granted only through the formal exemption process.

FOR FURTHER INFORMATION CONTACT: William H. Hark, M.D., Aeromedical Standards Division, Office of Aviation Medicine, Associate Administrator for Aviation Standards, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426–3802.

SUPPLEMENTARY INFORMATION:

On December 1, 1980, the FAA issued Notice of Proposed Rulemaking No. 80–24 (45 FR 80296; December 4, 1980), proposing to articulate in part 67 the exemption procedures for issuing airman medical certificates to persons who do not qualify for certification under the medical standards in §§ 67.13, 67.15, or 67.17. Notice 80–24 also proposed to revise the medical standard for applicants with a medical history or clinical diagnosis of heart disease. A public hearing on this Notice was held on February 3 and 4, 1981. All interested persons have been given an opportunity to participate in the making of the proposed regulations, and due consideration has been given to all matters presented.

Summary

After consideration of all the comments received in response to Notice 80–24 and presented at the public hearing, the FAA has taken the following actions in adopting this final rule:

1. In accordance with Executive Order 12291, Federal Regulation, the FAA has decided that it should undertake an overall review of the medical standards in part 67 of the Federal Aviation Regulations. This total and comprehensive review will be a major rulemaking effort to obtain the views of the medical profession and all interested parties, and could result in significant revision of part 67.

2. To improve the responsiveness of the medical certification system, the special issuance procedures in § 67.19 are being amended to apply them to all medical conditions, including those for which relief was previously granted only by exemption. The exemption procedures proposed in Notice 80–4 are not being added to part 67 since the practice of granting relief through these procedures will be discontinued. This procedural reform is expected to decrease the time an applicant must wait for a decision on certification by reducing the administrative burden on the FAA.

3. To expedite access to the National Transportation Safety Board (NTSB), in many cases, this final rule revises § 67.25 to increase the instances in which the denial of a certificate by an official other than the Federal Air Surgeon may be considered the final decision by the Administrator that is necessary before the applicant can appeal to the NTSB. (This will not, however, preclude a request for further consideration by the Federal Air Surgeon, in consultation with appropriate medical specialists, should the applicant so desire.)

4. To make it possible for certain airmen to perform activities that can be safely performed with their specific physical capabilities and overall medical condition, this final rule delegates authority to place functional limitations on medical certificates issued under § 67.19 to the Federal Air Surgeon, in coordination with the Director of Flight Operations. The rule limits their use to second- and third-class medical certificates, without prejudicing those individuals already holding first-class certificates with functional limitations.

5. To state clearly the FAA's policy, § 67.19 is being amended to state that, in granting discretionary special issuances to applicants for private pilot certificates, the Federal Air Surgeon considers the freedom of these applicants to accept reasonable risks to their person and property that are not acceptable in the exercise of commercial or airline transport privileges, and, at the same time, considers the need to protect the public safety of persons and property in other aircraft and on the ground.

6. To eliminate confusion over the meaning of the cardiovascular standards in §§ 67.13(e)(1), 67.15(e)(1), and 67.17(e)(1) and thus avoid the possibility of unrestricted certification of individuals who do not meet those standards, the FAA is adopting an interim clarification of those provisions. Notwithstanding their clarification at this time, the cardiovascular standards, along with all other medical standards, will be made the subject of the overall review of part 67.

7. To ensure that the alcoholism standard in part 67 clearly conforms to the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, the applicable provisions are being revised. The standard itself will not provide for certification of individuals who submit clinical evidence of recovery, including, among other things, a 2-year period of sustained abstinence. This will provide relief in the certification standard itself to many individuals who in the past could seek certification only through the exemption process.

Background

Medical Certification of Airmen

Part 67 of the Federal Aviation Regulations (14 CFR part 67) provides for the issuance of three classes of medical certificates. A first-class medical certificate is required to exercise the privileges of an airline transport pilot certificate. Second- and third-class medical certificates are needed for commercial and private pilot certificates, respectively.

An applicant who is found to meet the appropriate medical standards, based on a medical examination and an evaluation of the applicant's history and condition, is entitled to a medical certificate without restrictions or limitations other than the prescribed limits as to its duration. These medical standards are set forth in §§ 67.13, 67.15, and 67.17 (14 CFR §§ 67.13, 67.15, and 67.17).

An applicant for a medical certificate who is unable to meet the standards in §§ 67.13, 67.15, or 67.17 may nevertheless be issued an appropriate medical certificate under one of two procedures. These procedures have always been available, and, thus, these standards have never been ''absolutely disqualifying,'' in the sense that certification was permanently denied all who did not meet the standards.

Under § 67.19, ''Special issue: operational limitations,'' at the discretion of the Federal Air Surgeon, acting on behalf of the Administrator under § 67.25, a special flight test, practical test, or medical evaluation may be conducted to determine that, notwithstanding the applicant's failure to meet the applicable medical standard, airman duties can be performed, with appropriate limitations or conditions, without endangering safety in air commerce. If this determination can be made, a medical certificate may be issued with appropriate limitations to ensure safety.

Prior to this amendment, however, applicants with certain medical conditions could not use the special issuance procedures in § 67.19. That section has not allowed a special issuance of a medical certificate to applicants with an established medical history or clinical diagnosis of any of the following: (1) A personality disorder severe enough to have repeatedly manifested itself by overt acts; (2) a psychosis; (3) alcoholism; (4) drug dependence; (5) epilepsy; (6) a disturbance of consciousness without satisfactory medical explanation of the cause; (7) myocardial infarction; (8) angina pectoris or other evidence of coronary heart disease that the Federal Air Surgeon finds may reasonably be expected to lead to myocardial

infarction; or (9) diabetes mellitus that requires insulin or another hypoglycemic drug for control. (The one exception to this policy has been for air traffic control tower operators.)

The second procedure open to an applicant denied certification under §§ 67.13, 67.15, or 67.17 (and the only one previously available to those with conditions excluded from § 67.19) has been to petition for a formal exemption from the specific medical standard he or she had failed to meet, in accordance with § 11.25, ''Petitions for rulemaking and exemptions'' (14 CFR 11.25). If the relief requested was in the public interest and provided a level of safety equivalent to that provided by the standard, an exemption was issued authorizing an appropriate medical certificate.

Proposed Amendment

Notice 80–24 proposed specific exemption procedures for part 67. They were proposed in response to a Federal District Court decision in the case of *Delta Air Lines, Inc.,* v. *United States, et al.,* 490 F. Supp. 907 (N.D. Ga. 1980) (*Delta* case). In that case Delta Air Lines challenged the authority of the Federal Air Surgeon to place certain limitations on airman medical certificates issued under the authority of exemptions from part 67 and questioned the propriety of issuing exemptions at all under the current regulatory structure of part 67.

In its decision the Court found that the Federal Air Surgeon, in granting exemptions from part 67, had acted improperly in placing functional limitations on the medical certificates issued under the authority of exemptions as well as those issued under § 67.19. These functional limitations (such as ''not valid for pilot-in-command duties'') restrict the position which an airman can hold in the cockpit. The Court found that the Federal Air Surgeon had not been delegated authority to impose these limitations.

The Court distinguished these limitations from operational limitations which, the Court found, are properly placed on medical certificates. They relate to procedures by which the applicant can be enabled to perform his or her duties (such as ''pilot must wear corrective lenses'' or, for pilots with defective color vision, ''not valid for night flight or by color signal control'').

Secondly, the Court found that in issuing exemptions from the nine areas excepted from the special issuance procedures in § 67.19, the FAA had effectively amended part 67. Although the FAA's evolving procedures were based on the advance of medical technology, the Court determined this change in policy had not been adopted in accordance with the Administrative Procedure Act.

While Notice 80–24 proposed explicit exemption procedures for part 67 with special emphasis on the nine areas excluded from § 67.19, the FAA has now determined that it should not continue to use the formal exemption process to grant relief to individuals who do not meet the medical standards for certification in §§ 67.13, 67.15, and 67.17. Instead, this relief can be provided more efficiently through the special issuance procedures and, to facilitate this, the nine exclusions are being deleted from § 67.19.

Exemption Process

A complex administrative procedure is involved in processing a formal petition for exemption from the medical standards of the Federal Aviation Regulations. It requires the preparation of extensive and detailed documents, the establishment of a public docket, and action by the Federal Air Surgeon and the Chief Counsel, on behalf of the Administrator. It creates an additional burden for the FAA and the airman seeking relief from disqualification under the medical standards. Moreover, as medical evaluation and treatment techniques have improved, increasing numbers of airmen with serious conditions have sought, and been granted, medical certification through the exemption process as the only avenue of relief available. The resulting increases in administrative processing time inconvenience petitioners, and the additional expenditure of FAA resources is significant. Numerous comments to Notice 80–24 indicate dissatisfaction with this system.

Special Issuance Procedures

The FAA's experience indicates that the medical certification of airmen with a history of serious illness is no longer unusual. It has determined that evaluation utilizing a broad range of medical expertise can be obtained through the more routine procedures for a special issuance under § 67.19, thereby reducing administrative delays and costs. By removing the nine exclusions from this section, any airman found to have a specifically disqualifying condition under the medical standards of part 67 may request an evaluation by the Federal Air Surgeon; the Chief, Aeromedical Certification Branch, Civil Aeromedical Institute; or a Regional Flight Surgeon for the special issuance of a medical certificate under § 67.19.

Years of experience with the special issuance of medical certificates in cases other than the nine excluded conditions indicate that extension of the authority to the Chief, Aeromedical Certification Branch,

Civil Aeromedical Institute, and the Regional Flight Surgeons to include those specified conditions will not impact adversely on airmen or on the safety of the certification process.

When a medical condition previously excluded from § 67.19 is involved, factors that will generally be considered in determining whether such an issuance is appropriate are, with some revision, those proposed in Notice 80–24 for consideration under exemption procedures. They are discussed later in this preamble.

Thus, by reducing the administrative delays of the exemption process and by decentralizing the decision authority in cases of specifically disqualifying conditions, significant improvements in system responsiveness and efficiency are possible.

Final Denial of Medical Certificates

Section 67.25 is being revised to give the Chief of the Aeromedical Certification Branch of the Civil Aeromedical Institute and the Regional Flight Surgeons additional authority to issue denials of medical certificates that are ''final'' for the purposes of appeal to the NTSB. Previously, the authority to issue a denial under section 602 of the Federal Aviation Act of 1958 (49 U.S.C. 1422), i.e., a ''denial by the Administrator,'' had been delegated only in the case of the nine medical conditions specified in §§ 67.13(d)(1)(i), (d)(2)(i), (e)(1), and (f)(1); 67.15(d)(1)(i), (d)(2)(i), (e)(1), and (f)(1); and 67.17(d)(1)(i), (d)(2)(i), (e)(1), and (f)(1). Since final denial under section 602 of the Federal Aviation Act of 1958 is required before an appeal can be taken to the National Transportation Safety Board, this change will speed and simplify the review process for additional applicants.

Under this amendment a final denial of a medical certificate may now be issued by one of these officials in all cases except those involving an unspecified mental or neurologic condition or general medical condition that is disqualifying because of a finding by the Federal Air Surgeon that the condition makes the applicant unable to perform airman duties safely or may reasonably be expected, within 2 years, to make him unable to perform those duties safely. (These conditions are specified in §§ 67.13(d)(1)(ii), (d)(2)(ii), and (f)(2); 67.15(d)(1)(ii), (d)(2)(ii), and (f)(2); and 67.17(d)(1)(ii), (d)(2)(ii), and (f)(2).) The cases frequently involve unique situations for which uniform guidance cannot be prepared and which require the application of special medical expertise and careful individualized review. For this reason, any final denial should be by the Federal Air Surgeon, personally, on behalf of the Administrator.

It should be noted that, notwithstanding this delegation, an applicant may still seek reconsideration by the Federal Air Surgeon of any denial by one of these officials. As appropriate during this reconsideration, the Federal Air Surgeon will continue the practice of consulting with a group of medical specialists from outside the FAA.

No Change in Policy

While this amendment changes the procedure by which certificates are issued to certain individuals who have been disqualified under §§ 67.13, 67.15, and 67.17, it does not reflect a change in the policies of the FAA with respect to determining whether those individuals are medically acceptable for exercise of airman privileges. The certificate process will continue to utilize, where appropriate, objective consultant medical specialists whose opinions will ensure specialized expertise in the review of medical certificate cases. Using every appropriate evaluative technique, the Federal Air Surgeon, acting on behalf of the Administrator, will continue to issue medical certificates to applicants who are able to perform airman duties without endangering safety in air commerce, after considering all available information on the applicant, the natural history of the disqualifying medical condition, and the need for any limitations.

Acceptance of Medical Risk by Certain Pilots

In deciding whether to issue a certificate under § 67.19, the Federal Air Surgeon must balance the needs and desires of the applicant against the risks to society. The FAA recognizes that individuals should be allowed the maximum freedom of choice, consistent with safety in air commerce, in deciding the extent to which their exercise of airman privileges should be limited by their personal health.

On the one hand, safety in air commerce demands that an individual with a potentially incapacitating medical condition not be allowed to operate aircraft under circumstances in which there would be a significant risk of injury to other persons in the air or on the ground, or of substantial damage to the property of others. On the other hand, there are situations in which such an individual could operate an aircraft for recreation or transportation, even when it is incidental to an occupation, without significant risks to others, but accepting some risks to his or her own person.

The commercial or airline transport pilot, in virtually every circumstance, has the life or property of another individual in his or her care. For this reason, if there is a reasonable risk that such a

pilot may experience an incapacitating medical event, even though that risk may be relatively small, the Federal Air Surgeon must consider the degree of protection to which the public is entitled in commercial operations. When transportation by an air carrier is involved, the Federal Aviation Act requires the Administrator, on whose behalf the Federal Air Surgeon acts, ''to consider the duty resting upon air carriers to perform their services with the highest possible degree of safety in the public interest'' (49 U.S.C. 1421).

The private pilot, however, is not in the business of providing safety transportation of another's person and property. If the risk of incapacitation is sufficiently remote, so that persons in other aircraft and on the ground are not endangered, it is necessary to impose those limitations on the pilot that would be designed to provide the extra level of protection to which the public is entitled in the case of a commercial or airline transport pilot. Thus, when reasonable safeguards of other individuals are provided, the private pilot should be allowed to return to flying after recovery from, or control of, potentially incapacitating disease has been clearly established. This amendment revises § 67.19 to state this policy governing special issuance of third-class medical certificates.

Changes to § 67.19

Notice 80–24 proposed to add a new § 67.18 to specifically state that exemptions from §§ 67.13, 67.15, and 67.17 are issued in accordance with part 11 (14 CFR part 11), and that petitions for exemption from that part are granted or denied by the Federal Air Surgeon. Since all relief to qualifying individuals is now expected to be provided through § 67.19, proposed § 67.18 is not being adopted.

Paragraph (b) of proposed § 67.18 would have specified the limitations and conditions that the Federal Air Surgeon may place on a certificate. This paragraph is being adopted as part of § 67.19. It provides that the Federal Air Surgeon may limit the duration of the certificate, condition the continued effect of the certificate on the results of subsequent medical tests, examinations, or evaluations, and impose any operational limitation on the certificate needed for safety. Historically, conditions and limitations such as these have been placed both on medical certificates issued under § 67.19 and on those issued under an exemption.

Functional Limitations

Revised § 67.19(b) provides that the Federal Air Surgeon may condition the continued effect of the certificate on compliance with a statement of functional limitations issued in coordination with the Director of Flight Operations or the Director's designee. Proposed § 67.18 would have required a separate finding of equivalent level of safety by the Director. Also, contrary to the proposal, these functional limitations will only be issued in connection with second- and third-class certificates.

While functional limitations such as ''not valid for pilot in command'' have been issued for all classes of medical certificates in the past, this rule limits their use to second- and third-class certificates only. First-class certificates will not be issued with limitations that would prevent the holder from exercising the only airman privilege for which such a certificate is required by the regulations, namely, acting as pilot in command in operations conducted under part 121 and certain operations under part 135. If the applicant's condition is such that he or she should not be allowed to act as pilot in command in those operations, a second-class certificate may be issued to medically qualified applicants to allow them to perform other crewmember duties.

Those airmen now holding first-class certificates with functional limitations may continue to be so certificated if there is no adverse change in the medical condition concerned and if they otherwise meet the standards. This will avoid any inequity that might result if this amendment were to be applied retroactively.

The FAA received a number of comments concerning functional limitations. The history of the FAA's use of these limitations will be further discussed in response to those comments.

Factors Considered

Proposed § 67.18 would have specified the factors that are considered in connection with a petition for exemption, if the applicant has one of the medical conditions (other than diabetes) excluded from § 67.19. These factors are not listed in § 67.19 to provide flexibility for medical advancements and to avoid the interpretation that they are all-inclusive or that, individually or collectively, they represent mandatory criteria. However, in determining eligibility for medical certification under § 67.19, those general factors will be considered.

In every case the FAA considers the natural history and severity of the problem, the period of satisfactory recovery since manifestation of the problem, and any treatment, as well as any continuing requirements for treatment, and its nature.

Personality Disorder, Psychosis, or Drug Dependence

In the case of an applicant who has had a personality disorder, psychosis, or drug dependence, the factors considered include: (1) Any current or recent psychiatric symptoms, aberrant behavior, or psychiatric or other medical findings; (2) the need for, or the use or abuse of, any clinical agents, for either therapeutic or recreational purposes; (3) any personality traits or other recognized factors involving the risk of future recurrence of the problem or the risk of other adverse events; and (4) the current psychiatric and psychological functional status and stability of the applicant, as determined by appropriate evaluative techniques.

Alcoholism

Where the applicant has an established medical history or clinical diagnosis of alcoholism and is not qualified under the standard revised by this amendment, the factors considered under § 67.19 would include: (1) The period of the applicant's abstention from alcohol; (2) the severity of the problem and how long it has existed; (3) the number of times treatment was sought and relapse occurred; (4) the quality of the final treatment effort; (5) the presence of residual medical complications, especially neurologic manifestations; (6) progress in marital, social, vocational, and educational areas, as appropriate, since rehabilitation began; (7) commitment to rehabilitation by virtue of continuing contacts with social or professional agencies, or both, and their opinions and recommendations; (8) any underlying personality difficulties that would either be disqualifying independently or adversely affect sustained abstinence; and (9) the findings of a recent psychiatric and psychologic evaluation.

Where there is a history or diagnosis of alcoholism, one factor proposed in Notice 80–24 will not be considered. The FAA agrees with the Air Line Pilots Association (ALPA) that the age of the onset of alcoholism and the individual's stability and adjustment before the onset can only be estimated, and are of questionable usefulness as evaluation factors. ALPA is an organization with considerable experience in the diagnosis, treatment, and rehabilitation of pilots with alcoholism.

Epilepsy or Disturbance of Consciousness

For an applicant with a history or diagnosis of epilepsy or disturbance of consciousness, the factors would include: (1) Any current or recent neurological symptoms or neurological or other medical findings; (2) the availability of an explanation for the cause of the problem that is acceptable in terms of risk for future recurrence; (3) any recognized factors involving the risk of future adverse neurological events or of other adverse events; and (4) the anatomic integrity and functional status of the nervous system as determined by appropriate evaluative techniques.

Cardiovascular Problems

In the case of an applicant who has a medical history or current diagnosis of a disqualifying cardiovascular problem, the factors would include: (1) Any current or recent cardiovascular symptom, or cardiovascular or other medical finding; (2) the functional capacity of the heart as measured by appropriate techniques; (3) the presence or absence of myocardial ischemia or of the anatomic propensity for it; (4) the presence of, or likelihood of, changes in heart rhythm that could affect the individual's level of consciousness or ability to perform in the aviation environment; and (5) any recognized factor involving the risk of future adverse cardiovascular events.

Diabetes

The Federal Air Surgeon will continue to deny certification to individuals who have an established medical history or clinical diagnosis of diabetes that is controlled by the use of insulin or another hypoglycemic drug. The FAA has not found circumstances under which such an individual may be certificated without significant risk of impairment of his or her faculties from an undetected drop in the level of blood sugar. If future medical advances should make certification possible, factors will be developed.

Clarification of Cardiovascular Standard

Notice 80–24 also proposed to amend §§ 67.13(e)(1), 67.15(e)(1), and 67.17(e)(1) which specifically disqualify applicants with a medical history or clinical diagnosis of a ''myocardial infarction'' (paragraph (e)(1)(i)) or ''angina pectoris or other evidence of coronary heart disease that the Federal Air Surgeon finds may reasonably be expected to lead to myocardial infarction'' (paragraph (e)(1)(ii). It proposed to revise (e)(1)(ii) to make it clear that angina pectoris is disqualifying in and of itself since a history

or diagnosis of angina pectoris normally indicates heart disease with significant risk of incapacity. It further proposed to add a paragraph (e)(1)(iii) to reflect the Federal Air Surgeon's consistent and well-established policy of denying applications for medical certificates under §§ 67.13, 67.15, to 67.17 by applicants with a known history of ''coronary heart disease, treated or untreated,'' whether or not the medical events specified in paragraph (i) or (ii) have occurred.

Although Notice 80–24 used the words ''coronary heart disease'' in proposed paragraph (e)(1)(iii), the comments received indicated public concern that the minimal and insignificant degrees of coronary atherosclerosis found in many young persons could be considered disqualifying. There also was concern that the rule could be used to require more invasive testing of applicants who had no history, signs, symptoms, or findings of disease. The agency agrees that change from the proposed wording for clarification is appropriate to relieve these concerns.

Accordingly, the proposed working of paragraph (e)(1)(iii) of these provisions is revised to read: ''Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant.'' This revision better expresses the intent of the proposal, i.e., to clarify the standard to reflect the policy of the FAA that individuals with a history of coronary heart disease not be medically certificated for the exercise of airman privileges under §§ 67.13, 67.15, or 67.17. These individuals may be certificated through the discretionary special issuance procedures of § 67.19 after a separate determination that their disease no longer represents a risk to aviation safety.

In the past, FAA practice has been to deny any application for medical certification by an applicant who has a history or finding of coronary heart disease, including those who have undergone coronary artery bypass surgery and grant medical certification, where possible, via the formal exemption process. This disqualification has been consistent with the medical standards of part 67. Subsequent medical certification, where possible, has been based upon acceptable evidence that the individual has adequately recovered and that his or her anatomic and physiologic cardiac status would not represent a significant risk to aviation safety in the subsequent exercise of airman privileges. Airmen were issued medical certificates through a grant of exemption that specified the airman privileges permitted and which required periodic medical reevaluation to detect the relapse or progression of disease known to occur ultimately in a large percentage of cases. This procedure protected the public while providing a means for relief for those individuals whose heart disease had stabilized sufficiently so as to pose an acceptable risk.

A number of commenters express the belief that the cardiovascular standards for certification under §§ 67.13(e)(1), 67.15(e)(1), and 67.17(e)(1) should be relaxed. Commenters also suggest that these standards be revised to set forth more detailed, objective criteria and tests by which medical certification can be determined. (In fact, the latter comment has been made the subject of a separate petition for rulemaking by a group of concerned pilots). Many commenters contend that the standards, and for that matter all of part 67, fail to take into account the advances in corrective surgery and treatment that have occurred since the part was issued.

Need for Review of Part 67

These comments, as they apply to the proposal, are discussed later in this preamble. The broader, substantive issues which they raise, however, cannot be resolved within the context of this rulemaking action. These issues warrant full consideration in a detailed and comprehensive review of the medical standards contained in part 67, and the FAA plans to undertake such a review in response to these comments.

Some commenters are asking, for example, that objective standards for recertification after corrective heart surgery by placed in §§ 67.13, 67.15, and 67.17. While the risks of incapacitation associated with coronary heart disease are well known (including crippling chest pain, arrythmia, infarction, and sudden death), predictions of the likelihood of such incapacitating events in particular cases have proven as difficult as predicting the course of the disease itself. Accordingly, in the past, it has been even more difficult to make generalizations about such risks in a manner that would enable the setting of objective standards to be applied to all applicants with known coronary artery disease.

Through the exemption process, the agency has recertificated many such applicants after extensive evaluations of their particular circumstances, including the need for particularized limitations, restrictions, or requirements for followup tests at intervals shorter than the normal duration of the certificate involved. Each of these evaluations has required examination of numerous factors relevant to risks, their interrelationship, and their variable significance as applied to each individual's known circumstances of health. Where a reasoned, albeit subjective, medical judgment can be made that there are no significant safety risks attributable to a particular pilot's condition, within any operational or other limitations prescribed, the pilot has been recertificated.

The question thus posed by many of the commenters is: Is it not feasible to articulate the considerations that support the issuance of these exemptions as objective, generally applicable regulatory standards and, in the process, relax the current standards appropriately? As will be discussed later, the answer is not readily available, as some commenters imply, from a review of medical literature, such as the report of the Eighth Bethesda Conference of the American College of Cardiology (1975).

Whether recommendations of either the Eighth Bethesda Conference or those who commented on Notice 80–24 can feasibly serve as generally-applicable regulatory certification standards is an issue requiring a major effort to obtain the views of the medical profession and of all interested parties. That effort will be undertaken as part of the review of all the medical standards in part 67.

Need for Interim Clarification

Pending completion of review of the certification standards reflected in current part 67, the need for immediate clarification of the cardiovascular standard remains. The NTSB's recent interpretations of the present standards in §§ 67.13(e)(1), 67.15(e)(1), and 67.17(e)(1) are in sharp conflict with the certification policies and regulatory history underlying these standards. In several medical certification decisions the NTSB found airmen qualified for unrestricted medical certificates despite a history of significant coronary heart disease. Recently the NTSB determined, upon appeal by several airmen, that a history of coronary heart disease treated by bypass surgery was not disqualifying under part 67. In these cases, the Board has equated the functional improvement afforded by such surgery to the elimination of significant risks of incapacitation associated with coronary artery disease. Under these determinations, the NTSB ordered the issuance of medical certificates of all three classes to these airmen. The certificates issued, therefore, contain neither limitations nor requirements for periodic medical re-evaluation. Further, the NTSB decisions limit the FAA's ability to obtain subsequent medically appropriate evaluations for determining continuing eligibility for certification is some cases. In others, the NTSB disregarded medical information the FAA considered adverse.

Under the Federal Aviation Act of 1958, section 602(b), it is the responsibility of the FAA to determine whether an applicant for an airman certificate is physically able to perform the duties pertaining to that certificate. Medical certification of airmen and the regulations pertaining to it are part of the FAA's fulfillment of that mandate. Section 602(b) also provides that an applicant who is denied certification by the FAA may petition the NTSB for review of the FAA's action, and the NTSB shall determine whether the airman meets the rules, regulations, or standards that the FAA has established. In several recent cases. the NTSB has interpreted the medical standards of §§ 67.13(e)(1), 67.15(e)(1), and 67.17(e)(1) in a manner inconsistent with the intent and practice of the FAA.

To meet the FAA's statutory responsibility to ensure safety in air commerce, interim clarification of the cardiovascular standard is necessary, pending substantive review of part 67. The rule as adopted makes it clear, pending further rulemaking, that an airman with a demonstrated history of coronary heart disease resulting in treatment or which has been otherwise clinically significant does not meet the requirements for certification under §§ 67.13, 67.15, or 67.17. These persons will continue to have the opportunity for discretionary certification under the special issuance procedure, which replaces the more cumbersome exemption process. A specific goal of the part 67 review to be undertaken will be to determine the extent to which these persons' medical qualifications can be evaluated under objective standards to be specified in the regulations themselves.

Revision of Alcoholism Standard

After the publication of Notice 80–24, the United States Court of Appeals for the Ninth Circuit held that §§ 67.13(d)(1)(i)(*c*), 67.15(d)(1)(i)(*c*), and 67.17(d)(1)(i)(*c*), disqualifying an applicant for airman medical certification because of an established medical history or clinical diagnosis of alcoholism, were invalid (*Jensen* v. *FAA*, 641 F.2d 797 (9th Cir. 1981)). This decision is based upon the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, 42 U.S.C. § 4651(c)(1) (Hughes Act):

> No person may be denied or deprived of Federal, civilian or other employment or a Federal professional or other license or right solely on the grounds of prior alcohol abuse or prior alcoholism.

The Court agreed, however, that the FAA may still consider alcoholism in its certification process and ''may enact regulations prohibiting certification of current alcoholics if that term is adequately defined.'' It further suggested that determinations of abstinence for appreciable periods of time and inquiry into the public health consequences of prior alcoholism were appropriate and complied with the Hughes Act.

The FAA has, in the past, complied with the policy of the Hughes Act by recertifying recovered alcoholics through the exemption process under which the subjective elements of rehabilitation were evalu-

ated on an individual basis and the regulations' prohibition waived in appropriate cases. In view of the Court's decision, however, the FAA is amending §§ 67.13(d)(1)*(c),* 67.15(d)(1)*(c),* and 67.17(d)(1)*(c)* to provide that an established medical history or clinical diagnosis of alcoholism is disqualifying for airman medical certification unless there is documented clinical evidence of recovery, satisfactory to the Federal Air Surgeon. The rule specifically states that this evidence must include sustained total abstinence from alcohol for not less than the preceding 2 years. Other factors considered include the problem's severity, frequency, and treatment; residual medical complications; progress in, and commitment to, rehabilitation; personality difficulties; and recent psychiatric and psychologic findings.

Individuals who do not meet the revised standard may be reconsidered for special issuance of a medical certificate under the provisions of § 67.19. As amended, this rule will allow the continuation of the successful programs that have enhanced aviation safety by encouraging self-identification, treatment, and rehabilitation, and the return to flying activities of many pilots.

Analysis of Comments

The FAA received approximately 300 public comments in response to Notice 80–24. Most of the comments address themselves to the revision of the cardiovascular standards and the perception that the proposed amendments alter the rights of airmen to appeal adverse certification decisions. Only 14 comments specifically address the proposed exemption procedures. Many comments refer to issues not pertinent to the proposed rule.

On February 3 and 4, 1981, the FAA held a public hearing to exchange views on the proposed amendment. Representatives of the aviation industry and interested individuals attended that meeting. Two hundred pages of testimony were taken.

Nature of Disqualification

One hundred twenty-two commenters object to making certain medical conditions, such as myocardial infarction, disqualifying under §§ 67.13, 67.15, and 67.17. The objection stems from the commenters' belief that part 67, which is more than 20 years old, fails to take into account the advances in corrective surgery and treatment that have occurred since the rule was issued. Many commenters characterize the regulations as making these conditions ''automatically disqualifying for life.'' Forty-two commenters recommend that cardiovascular problems not be ''absolutely'' disqualifying under §§ 67.13, 67.15, or 67.17, but only be considered as temporarily disqualifying until an individual has recovered sufficiently to be recertificated. Some commenters are concerned that coronary artery bypass surgery would be absolutely disqualifying under these provisions.

The FAA still considers the history or presence of significant heart disease, regardless of treatment, to preclude routine medical certification of the airmen affected. Further, any coronary heart disease that has required treatment is considered significant. While the ability to diagnose, evaluate, and intervene therapeutically has been enhanced by modern medical advancements, certification should be granted only after extensive individual evaluation and review by specialist, and discretionary requirements for periodic reevaluation and any appropriate operational or functional limitations remain necessary.

It is not accurate to characterize the disqualifying medical conditions in §§ 67.13, 67.15, and 67.17 as ''absolutely disqualifying'' or ''automatically disqualifying for life.'' Although individuals with a history or diagnosis of these conditions are ''disqualified'' under §§ 67.13, 67.15, or 67.17, the Federal Aviation Regulations still provide for individual consideration (formerly through the exemption process and now under § 67.19) using all appropriate and available evaluative techniques, including new developments, to determine what airman privileges, if any, can be safely exercised. That the specified conditions in §§ 67.13, 67.15, and 67.17 do not permanently prevent a person from exercising airman privileges is evident from past FAA decisions to certificate medically, after individual evaluation, thousands of airmen who did not meet these standards. As already noted, revised § 67.19 provides an administratively simpler mechanism for these actions, removing any requirement that airmen obtain exemptions.

Breadth of the Cardiovascular Standard

One major pilots' organization expresses concern that the proposed change in the wording of the cardiovascular standard seems to be a reversion to an unwarranted and unnecessarily harsh and broad standard. The commenter suggests that it be revised to read, ''No established medical history or clinical diagnosis of any of the following: (i) Myocardial infarction; (ii) angina pectoris; (iii) coronary heart disease, treated or untreated, if symptomatic and clinically significant.''

As already noted, the FAA recognizes that the term ''coronary heart disease'' is perceived by many commenters as including nonsignificant coronary atherosclerosis. Therefore, the interim standard, as adopted, has been expressed in language similar to that suggested by this commenter.

Exemptions for Alcoholism

The same pilots' organization strongly recommends that a history or diagnosis of alcoholism no longer should require a grant of exemption before certification is possible. In addition to the revision of the standard already discussed, § 67.19 now permits certification, when appropriate, through special issuance procedures without need for the formal exemption process, regardless of the medical condition involved.

Right of Appeal to the NTSB

One hundred fifteen commenters express concern that protection be given to the right to appeal any adverse certification decision by the Federal Air Surgeon, particularly after the denial of certification because of coronary heart disease.

Neither the proposed nor the final rule deprives any airman of his or her appeal rights. An airman still has the right to request review by the NTSB of any denial of certification by the FAA based on the standards in §§ 67.13, 67.15, and 67.17, and that review will determine whether the denial was proper under those provisions. The intent of the revision of the heart disease standard, pending review of all part 67 medical standards, is not to deprive any individual of these rights, but to preclude further misinterpretations of the cardiovascular standards by the NTSB that have already resulted in issuing unrestricted and unmonitored medical certificates of all classes to individuals with histories of significant heart disease.

The interim change in the wording of the rule reflects the knowledge that a history or diagnosis of angina pectoris normally indicates heart disease with significant risk of incapacitation whether or not it can be stated that a myocardial infarction will result. The change also reflects the knowledge that no treatment, including surgery, can be relied upon to cure coronary heart disease, to eliminate the significant rate of disease progression, or to eliminate the risks of incapacitation attributable to the disease. Since, in some cases involving coronary artery bypass surgery and angina pectoris, the NTSB has interpreted the medical standards of the Federal Aviation Regulations as permitting unlimited and unmonitored certification, sometimes without successful completion of the medical evaluations considered necessary by the FAA, this revision of the language of the standard is necessary to ensure that the FAA fulfills its responsibility to promulgate rules necessary to provide safety in air commerce. However, no change in FAA certification policy or practice regarding cardiovascular disease is embodied in this revision. This has been evidenced by the longstanding uniformity of FAA practice in this regard and the regulatory history dating back to the original 1958 Flight Safety Foundation Medical Advisory Panel recommendations. Further, those airmen who have adequately recovered and whose medical evaluations indicate the absence of significant risk may be certificated, with appropriate limitations or conditions, under the discretionary special issuance provisions of § 67.19.

List of Criteria or Tests

One hundred forty-four commenters request that the standards include a list of specific criteria or tests which applicants for certification must satisfy. Some commenters mention the report of the Eighth Bethesda Conference of the American College of Cardiology (1975) in this regard.

As already noted, the FAA intends to consider these suggestions in conjunction with an overall review of the medical certification standards in part 67. However, it is important to state here why these interim cardiovascular standards are being issued in a format that is clearly contrary to that desired by these commenters.

In the past part 67 has stated certain medical conditions that are disqualifying in general terms. There are some areas such as vision where it has been possible to state minimum requirements by listing specific parameters. However, in other areas it has been the opinion of the FAA that the nature of medical science and the complexity and variability of the medical factors, as they affect different individuals and thereby influence flight safety, have made it impractical or impossible to promulgate generally applicable medical standards in any other format.

The FAA recognizes the need to inform the public as fully as possible of the basis for certification decisions. Medical evaluation, however, has rested heavily upon professional judgment regarding the relative weight and significant accorded every element of information available about the applicant. The complexity and variability of the medical factors considered have made it impractical and unwise to attempt to make a definitive listing of tests or examinations, as well as result parameters, which would categorically qualify or disqualify applicants with any given medical history or diagnosis. Even if information developed in the review of part 67 indicates that such a listing is practical, care must be taken that it does not result in arbitrary denial of certification to some individuals while providing for certification of others whose histories or current conditions indicate an unacceptable risk to aviation safety. In such a standard

there would have to be room for consideration of individual physiological differences; variations in disease manifestations; mitigating, exacerbating, or interactive findings; and the availability of alternative evaluative technology.

It should be noted that this preamble does specify the categories of information currently considered important in determining medical status where there is history or diagnosis of those severe disorders which permit certification only through the special issuance procedure. However, individual cases may involve consideration of additional factors, or exclusion of listed factors that are not pertinent. Information needed with respect to any factor, if not contained in the applicant's records, will be requested at the time of application for a special issuance.

Consideration of the pertinent factors in each case, however, determines the scope of the medical investigation and the appropriate methodology. Aeromedical certification decisions will be based, when appropriate, upon review by medical specialists of all data thus obtained.

Eighth Bethesda Conference

The report of the Eighth Bethesda Conference of the American College of Cardiology, a collection of scientific papers, has been used extensively by the FAA in developing certification policy and in making individual certification decisions. In most respects its recommendations closely followed already existing FAA procedures. It addresses considerations pertinent to the diagnostic and prognostic evaluation of individuals having or suspected of having heart disease. The FAA will continue to use this document as it was intended, that is, as a technical and policy resource.

Epidemiological Factors

A physician, a medical college professor, notes that more than half of all deaths from heart disease are due to sudden arrhythmias; that is, irregularities in the heart beat, which may not be preceded by other symptoms of heart disease, such as angina pectoris or myocardial infarction. This commenter describes epidemiologic risks for sudden death in relation to factors such as age, smoking history, and various electrocardiographic findings. He suggests their use in certification decisions. The detailed evaluations required for special issuance of medical certificates under § 67.19 presently provide for careful consideration of all risk factors. Consideration of how these factors might lend themselves to the development of specific requirements regarding each identified risk factor will be welcomed in the course of the part 67 review.

Diabetes

An organization composed of a large number of aircraft owners and pilots comments that Notice 80–24, in part, is inconsistent with the Federal Aviation Act of 1958 (FA Act) and with part 11 of the Federal Aviation Regulations. It argues that because these provisions authorize and provide procedures for issuing exemptions in the case of any medical condition when it is in the public interest, the FAA may not prejudge any medical condition. This comment is based upon the FAA policy regarding diabetes requiring insulin or other hypoglycemic agent for control. Notice 80–24 indicates that the FAA has not found information demonstrating the circumstances under which an individual with drug-controlled diabetes could be certificated and, therefore, no factors were included.

The FA Act only allows issuing airman certificates to applicants who are physically able to carry out the airman duties they seek to perform. The fact that procedures are available for certification of all individuals, under part 11 or otherwise, does not preclude the Federal Aviation Administrator, acting through the Federal Air Surgeon, from fulfilling this statutory requirement when he determines that all individuals with a specific medical condition cannot safely exercise airman privileges. The authority to grant exemptions from the Federal Aviation Regulations is discretionary. A policy that denies exemptions to every person disqualified under a specific section neither violates the Federal Aviation Act of 1958 nor is inconsistent with part 11 of the regulations.

Drug-controlled diabetes in a pilot still represents an unacceptable risk to flight safety. If, in the future, information demonstrating that medical technology has advanced to the point that diabetes can be controlled without significant risk of incapacitation from hypoglycemia or other complications becomes available to the FAA, consideration for special issuance of a medical certificate under § 67.19 will be possible.

Accident Statistics

The same organization objects to the proposed changes in the cardiovascular standards in §§ 67.13(e)(1), 67.15(e)(1) and 67.17(e)(1) on the basis that they are not justified by accident experience. The FAA does not consider it necessary to justify every rule with accident statistics. Positive regulatory actions

designed to promote or maintain a high level of aviation safety are preferred and more appropriate than those offered in response to system failure. The low incidence of medically related accidents must be considered testimony to the effectiveness of the medical certification system, not as an argument that medical certification should be liberalized. The current changes are needed to eliminate ambiguity.

Court Decision

The organization also suggests that the proposed changes are not responsive to the Court's decision in *Delta Air Lines, Inc.* v. *United States, et al.* However, the FAA considers this revision to part 67 to be fully responsive to the Court's decision. This amended rule makes clear that discretionary airman medical certification is possible in many cases despite a history or diagnosis of serious disease, and it provides relief through procedures more efficient than formal exemptions, and, thus, meets the Court's objection that this relief has been provided without compliance with the Administrative Procedure Act. It specifically expresses the delegated authority of the Federal Air Surgeon, on behalf of the Administrator, to issue medical certificates contingent upon compliance with operational limitations or, after coordination with the Director of Flight Operations, functional limitations for second- and third-class certificates.

Functional Limitations

One major professional pilots' organization and an organization representing a large number of other professional flight crewmembers oppose the proposal to permit the Federal Air Surgeon to issue medical certificates contingent upon a statement of functional limitations issued only by the Director of Flight Operations. They have no objection, however, to use of these limitations. These commenters suggest that involving the Director as a decisionmaker in determinations that are solely medical is an unwarranted reversal of FAA's policy of permitting only those with specific technical knowledge and specific expertise to make regulatory decisions. The commenters believe this would be confusing. Both commenters suggest that the authority should rest solely with the Federal Air Surgeon.

The FAA agrees that while the Director of Flight Operations has the capability to test an applicant's current ability to pilot an aircraft, he does not have the expertise to predict the consequences of an airman's medical condition. The proposed procedure is changed, therefore, to provide for determining functional limitations, where appropriate, by the Federal Air Surgeon in coordination with the Director of Flight Operations. For the reasons already noted, these limitations an authorized only for second- and third-class airman medical certification.

Commenters for one airline and for an association of airlines oppose the use of functional limitations to designate the cockpit duties of pilots. The airline believes that any regulation incorporating such limitations would impair the ability of airlines to perform their services with the highest possible degree of safety in the public interest. Further, this commenter states that if a pilot is medically qualified to justify the issuance of a first-class medical certificate, then he or she should be permitted to exercise all of the privileges of the certificate; that is, pilot in command, first officer, or second officer. The Airline believes that if the airman is not medically qualified, then he or she should not be issued the certificate. The association objects to granting functionally limited certificates to airmen not qualified by airline standards in the belief that it undermines the airline prerogative to determine the placement and duties of its flight crewmembers.

In the past, the FAA has used functional limitations to specifically match the duties an airman is authorized to perform with his or her physical capabilities and overall medical condition. Where some very small but acceptable element of existing aviation risk was perceived through medical evaluation, an exemption was granted or a certificate specially issued with appropriate followup requirements and limitations of function or responsibility. These limitations and reevaluation requirements ensured a level of safety equivalent to that in cases of airmen certified under the standards. In the belief that the class of certificate issued was inconsequential in cases where specific individual evaluation and specific limitations in authorized duties were delineated, the FAA applied this policy to all classes of medical certificates. Experience over 20 years has not indicated any adverse effect on safety.

As already noticed, first-class airman medical certificates will no longer be issued to individuals considered unacceptable for unlimited performance of all airman duties associated with a first-class certificate. Under the provisions of § 67.19, the FAA, where appropriate, will issue second- or third-class airman medical certificates with any operational or functional limitations that the Federal Air Surgeon deems necessary in the public interest to provide a level of safety equivalent to that provided by § 67.15 or § 67.17, as appropriate. In cases of airmen who previously have been issued first-class medical certificates with functional limitations and who have maintained certification without adverse medical change or functional difficulty, the FAA will continue to issue first-class certificates to them if the applicants otherwise remain qualified.

Mental Conditions

One professional organization suggests that the grouping of personality disorders, psychosis, and drug dependence into a single category is an arbitrary and misleading association since ambiguity exists within diagnoses. The commenter further expresses concern that the proposed rule would minimize the diagnostic input from psychologists and social workers. A multidisciplinary format is suggested with the rule specifically requiring assessment of affected airmen by psychiatrists, psychologists, and social workers.

The evaluation factors listed are public guidelines regarding the information considered significant in evaluating individuals disqualified under specific medical standards. The groupings are for convenience only, reflect the wording of the actual standards, and indicate only that the same factors are applicable for each of the grouped conditions. The factors are not necessarily all-inclusive and all may not be appropriate in every case.

The FAA accepts and considers medical evaluations from all recognized professional workers, though it sometimes requires specific information available only from workers in particular disciplines. When appropriate, psychiatrists, psychologists, and social workers are included. A ''team'' approach to diagnosis and treatment frequently is noted. Because the information needed must be provided and fees paid by the airman, however, the FAA requests only what is necessary for certification decisions. A rule that requires multiple professional consultations in every case would be unnecessarily burdensome.

Treatment Effort

The same professional organization also suggests that evaluation of an individual with a history of alcoholism should include an assessment of ''the quality of the final treatment response'' rather than, as proposed, ''the quality of the final treatment effort.'' Determining the final response is, of course, the objective in consideration of all factors. By use of the word ''effort,'' the FAA includes consideration of the quality of participation of the applicant in his or her treatment as well as the quality of the treatment facilities utilized.

Classification as a Nonsignificant Regulation

Notice 80–24 stated that the FAA had determined that the regulation proposed was not considered to be significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Twenty-seven commenters object to the ''nonsignificant'' classification placed on the proposed rule, citing the criteria for significance in the DOT Policies and Procedures in their comments. The commenters contend that the proposal should have received the review and concurrence of the Secretary of Transportation, as is required for significant regulatory actions.

Objections to the proposal's classification as nonsignificant were also raised at the public hearing held on February 3 and 4, 1981. The FAA advised the participants that its determination that the proposed action was not significant under the criteria of the DOT order would be reviewed in the light of all comments received in response to the notice and those presented at the public hearing. The FAA encouraged all interested individuals to provide to the rulemaking docket their comments regarding the specific impact of the proposal.

The FAA's initial determination that the proposal was not significant was reviewed by the Office of the Secretary of Transportation before it was issued, and the Department's Semiannual Regulations Agenda and Review List, issued by the Secretary (46 FR 20036; April 2, 1981), indicated agreement in this determination.

Because of controversy evidenced by these comments, the FAA has determined that this rulemaking should be considered significant under the criteria of the Department of Transportation Regulatory Policies and Procedures, and under those procedures, it has received review by the Office of the Secretary of Transportation. This amendment has also been reviewed by that office under current DOT procedures implementing Executive Order 12291, and in compliance with the Executive Order, has been reviewed by the Office of Management and Budget.

Public Interest

Granting airmen relief provided by this amendment is supported by the FAA's 20-year history with the medical exemption process. Through this experience, the FAA has determined that the public interest is best served when airmen who know, or have reason to believe, they are experiencing a medical problem are encouraged to submit themselves to medical treatment and rehabilitation as soon as possible. These airmen include commercial and air carrier pilots who depend on their medical certificate for their livelihood and on whom, in turn, the public depends for safe air travel. They also include general aviation pilots who share the airspace with those pilots and the traveling public.

Providing means by which these airmen may subsequently obtain a medical certificate discourages concealment of a disqualifying medical condition to avoid the permanent loss of employment or airman privileges. This incentive is necessary because, while there has been a marked improvement in the evaluation and treatment of many of these conditions, they cannot always be detected by a routine medical examination.

Encouraging airmen to seek medical treatment as early as possible benefits both the public and the airman. The public is protected from the risk that the airman may become incapacitated while operating an aircraft. The public also benefits because airmen who seek early treatment and voluntarily provide accurate medical information contribute to safety in air commerce. Voluntary disclosure to the FAA allows careful assessment of the condition and the opportunity for special periodic medical surveillance in the event that medical certification is considered appropriate. This contributes substantially to the fund of knowledge regarding these conditions and aviation medicine generally.

The airman's early recovery and return to flying is facilitated by disclosure, since early treatment substantially improves the prognosis for many conditions.

Economic and Social Benefits

Issuing certificates under § 67.19 provides economic and social benefits for the airman, the aviation community, and the general public. First- and second-class medical certificates allow applicants to participate in commercial aviation activities without compromising safety and reduce the likelihood that the petitioner will become economically dependent upon the public. Training costs to replace individuals who would otherwise be unable to act as airmen in commercial operations or for private hire are avoided and the pool of qualified aviation personnel is maintained. Third-class medical certificates allow applicants to pursue aviation activities without compromising safety and thereby contribute to the promotion of civil aviation generally.

Regulatory Evaluation

The FAA conducted a regulatory evaluation for this final rulemaking action. The FAA determined that this rule imposes no new requirements on airmen seeking first-, second-, or third-class medical certificates. However, the FAA has determined that this rule may conceivably impose minimal-to-negligible costs in the aggregate by impacting those individuals who have histories of significant heart disease, and through the NTSB appeals process, might have ultimately been issued unrestricted and unmonitored medical certificates. While the new regulation does not preclude an individual's right of appeal to the NTSB, it does clarify the intent with respect to cardiovascular standards and eliminates the possibility of further misinterpretation. Therefore, a few individuals who might otherwise be considered certifiable by the NTSB under that misinterpretation may be restricted from receiving medical certificates under the new regulations. Furthermore, this rule imposes no additional costs on the Federal Government.

Implementing this rule provides benefits in terms of cost savings in the aggregate to certain airmen who apply for medical certificates, especially those airmen who were disqualified under the conditions of previous regulations from receiving medical certificates because of certain medical conditions; to businesses which operate aircraft; and to the Federal Government. Specifically, this rule allows the initial qualification under §§ 67.13, 67.15, and 67.17 of individuals with a history of alcoholism that seek medical certificates where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence for not less than the 2 preceding years. Prior to this rule, a medical certificate for an individual with such a history could only be sought through the exemption process. Therefore, this rule eliminates individual processing costs and time lost due to the exemption process for airmen with this condition.

Additionally, this amendment provides means for discretionary special issuance of medical certificates to certain airmen who are otherwise disqualified because of a personality disorder that is severe enough to have manifested itself by repeated overt acts, psychosis, alcoholism, drug dependence, epilepsy, disturbance of consciousness without satisfactory medical explanation of the cause, myocardial infarction, angina pectoris or other evidence of coronary heart disease, or diabetes mellitus that requires insulin or other hypoglycemic drugs for control. Airmen with these medical conditions are expected to be granted relief, where appropriate, through a more immediate means of special issuance review action, thus eliminating the processing costs of seeking exemptions and reducing time lost in awaiting decisions. This rule also provides for further decentralization of FAA decision authority, thereby reducing the applicant's waiting time for a decision in such cases.

The total cost savings to airmen who apply for medical certificates in a given year will vary according to the number of airmen who would have been disqualified from receiving medical certificates under conditions of previous regulations and who are now provided relief through either initial qualification (in the case of alcoholism) or immediate review for special issuance of medical certificates; and the

value of time foregone, both personal and business-related, for applicants that sought medical certificates through the exemption process and special issuance process and are now provided a more timely review process. According to the FAA's *1980 Aeromedical Certification Statistical Handbook* for the period of 1961–1980, there were approximately 8,000 petitions for exemption filed that would now qualify for special issuance review. Cost savings, in terms of reduced training costs and reduced aircraft downtime, are also expected for businesses which operate aircraft.

Important cost savings will accrue to the Federal Government. This rule reduces the administrative case review time of documents, decentralizes the decision authority in special issuance cases, and increases FAA system responsiveness.

Accordingly, the benefits of this regulation outweigh any costs that may be incurred. However, the magnitude of the benefits and costs, and the number of small entities affected, do not involve a significant economic impact on a substantial number of small entities.

Adoption of the Amendments

Accordingly, part 67 of the Federal Aviation Regulations (14 CFR part 67) is amended, effective May 17, 1982.

Secs. 313(a), 601, and 602 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1421, and 1422); sec. 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

NOTE: Since this final rule amends part 67 to incorporate relief to airmen currently provided by the exemption process and does not impose any new cost or other economic burden on airmen, the FAA has determined that this is not a major regulation under Executive Order 12291. For these reasons and for the other reasons stated above, it is certified that, under the criteria of the Regulatory Flexibility Act, this final rule will not have a significant economic impact on a substantial number of small entities. However, because of the controversy over some aspects of the proposal, the FAA has determined that this regulation should be considered significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A copy of the final regulatory evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption ''FOR FURTHER INFORMATION CONTACT.''

Amendment 67–12

Fees for Certification of Foreign Airmen and Air Agencies

Adopted: July 21, 1982 **Effective: October 18, 1982**

(Published in 47 FR 35690, August 16, 1982)

SUMMARY: These amendments establish (1) a schedule of fees for issuing certain airman and repair station certificates to certain foreign nationals outside the United States; (2) a method for collecting those fees; and (3) a need requirement for original certification of those airmen (a need requirement has already been established for issuing certificates to foreign repair stations). These amendments are designed primarily to recover costs the FAA incurs in certificating foreign airmen and repair stations overseas. The amendment requires that certificates be issued overseas to foreign nationals only when needed to operate or assure the continued airworthiness of U.S.-registered civil aircraft. Finally, this amendment is in keeping with the intent of Congress.

FOR FURTHER INFORMATION CONTACT: Kathleen W. Gorman, Chief, International Analysis & Coordination Division (AIA–300), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426–3230; or Leo Weston, Chief, General Aviation and Commercial Branch (AWS–340), Aircraft Maintenance Division, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426–3546; or Arthur C. Jones, Chief, Certification Branch (AFO–840), General Aviation and Commercial Division, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 426–8196

SUPPLEMENTARY INFORMATION:

Background

On July 17, 1981, the FAA issued Notice of Proposed Rulemaking No. 81–12 (46 FR 40529; August 10, 1982) proposing: 1) to establish fees for issuance of certain airman and repair station certificates to foreign nationals residing outside the United States; 2) a method of collecting those fees; 3) a need requirement for those airmen; and 4) a 2-year limitation on the validity of certificates issued to foreign nationals. All interested persons have been given an opportunity to participate in the making of the proposed regulations, and due consideration has been given to all matters presented.

Statutory

Title VI of the Federal Aviation Act of 1958, as amended (the Act), gives the Administrator authority to issue certificates for airmen, instructors, schools, and repair stations. Section 602(b) states that the Administrator may, at his discretion, prohibit or restrict the issuance of airmen certificates to aliens.

In addition, the Administrator is charged with establishing a fair and equitable system for recovering full costs expended for any service, such as issuing the certificates discussed in Notice 81–12, which provides a special benefit to an individual beyond those which accrue to the general public. Title V of the Independent Offices Appropriation Act of 1952 (31 U.S.C. 483a) states:

> It is the sense of the Congress that any work, service, publication, report, document, benefit, privilege, authority, use, franchise, license, permit, certificate, registration, or similar thing of value or utility performed, furnished, provided, granted, prepared or issued by any Federal Agency . . . to or for any person (including groups, associations, organizations, partnerships, corporations, or businesses), except those engaged in the transaction of official business of the Government, shall be self-sustaining to the full extent possible. . . .

To give full effect to this sense of Congress, § 483a further provides:

> The head of each Federal agency is authorized by regulation (which, in the case of agencies in the executive branch, shall be as uniform as practicable and subject to such policies as the President may prescribe) to prescribe therefor such fee, charge, or price, if any, as he shall determine, in case none exists, or redetermine, in case of any existing one, to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts. . .

The statute provides that the amounts collected shall be paid into the Treasury as miscellaneous receipts.

OMB Guidance

To aid in establishing fee schedules, the Office of Management and Budget (OMB) has prescribed in Circular No. A–25, ''User Charges,'' the general guidelines to be used in developing an equitable and reasonable uniform system of charges of certain Government services and property.

The circular provides that ''Where a service (or privilege) provides special benefits to an identifiable recipient above and beyond those which accrue to the public at large, a charge should be imposed to recover the full cost to the Federal Government of rendering that service.'' Circular No. A–25 specifies:

A special benefit will be considered to accrue and a charge should be imposed when a Government-rendered service:

> (a) Enables the beneficiary to obtain more immediate or substantial gains or values (which may or may not be measurable in monetary terms) than those which accrue to the general public (e.g., receiving a patent, crop insurance, or license to carry on a specific business); or
>
> (b) Provides business stability or assures public confidence in the business activity of the beneficiary (i.e., certificates of necessity and convenience [sic: convenience and necessity] for airline routes, or safety inspections of craft); or
>
> (c) Is performed at the request of the recipient and is above and beyond the services regularly received by other members of the same industry or group, or of the general public (e.g., receiving passport, visa, airman's certificate, or an inspection after regular duty hours).

Previous Notices

Consistent with the guidelines in Circular No. A–25, in recent years the FAA issued several notices of proposed rulemaking to establish a schedule of fees for various FAA activities (Notices 67–17, 67–

18, and 78–6). The schedules were predicated, however, on the FAA's systemwide total cost of performing specific certification activities, and no attempt was made to distinguish the far greater costs incurred performing certification services overseas from costs incurred performing similar services in the United States. The proposed fee schedules were never implemented. Beginning in 1973, the Congress annually prohibited implementing fee schedules through language in the appropriations legislation for the Department of Transportation. In 1979, this prohibition was deleted from the appropriations legislation but included in Section 45 of the Airline Deregulation Act of 1978:

> Notwithstanding any other provision of law, neither the Secretary of Transportation nor the Administrator of the Federal Aviation Administration shall collect any fee, charge, or price for any approval, test, authorization, certificate, permit, registration, conveyance, or rating relating to any aspect of aviation (1) which is in excess of the fee, charge, or price for such approval, test, authorization, certificate, permit, registration, conveyance, or rating which was in effect on January 1, 1973, or (2) which did not exist on January 1, 1973, until all such fees, charges, and prices are reviewed and approved by Congress.

Before 1970, a liberal policy prevailed within the FAA regarding acceptance of applications for airman and air agency certificates by foreign nationals residing outside the United States. During the 1970's, however, the continuous expansion in worldwide demand for FAA certification services, along with the adverse movement of currency exchange rates against the U.S. dollar, placed an undue burden on FAA budgetary and manpower resources.

Simultaneously, the appropriateness of this policy was called into question. The technical sophistication of many foreign civil aviation certification authorities has been strengthened by general economic growth and civil aviation technical assistance provided by the International Civil Aviation Organization (ICAO), the United States, and other nations. Overly free exportation of U.S. certificates could deter the development of competent, indigenous certification programs. The FAA wishes to avoid that result and to encourage foreign governments in developing aeronautical codes and administrative capabilities which would permit them to conduct their own certification functions.

For these reasons the Administrator began a practice of restricting recertification of foreign nationals, primarily through the requirement that the applicant show that such certification is required to operate or assure the continued airworthiness of U.S.-registered civil aircraft (need requirement). This need requirement was incorporated in regulations governing certification of foreign repair stations (14 CFR § 145.71). To further ensure consistent implementation of this practice, these amendments incorporate the need requirement in the Federal Aviation Regulations (14 CFR parts 61, 63, 65 and 67) governing initial airman certification.

In 1980 Congress passed the International Air Transportation Competition Act of 1979, giving the Administrator authority to establish fee schedules for airman and repair station certificates issued outside the United States. Section 28 of that Act amends § 45 of the Airline Deregulation Act of 1978 to read as follows:

> Nothing in this section shall prohibit the Secretary of Transportation or the Administrator from collecting a fee, charge, or price for any test, authorization, certificate, permit, or rating, administered or issued outside the United States, relating to any airman or repair station.

Although § 28 provides discretionary authority to collect fees from any applicant residing outside the United States, this regulatory amendment establishes fees to be collected only from foreign nationals residing outside the United States.

Discussion of Amendments

In keeping with the authority granted under § 28 of the International Air Transportation Competition Act of 1979, these amendments establish a schedule of fair and equitable fees for airman and repair station certification activities performed for foreign nationals outside the United States. For purposes of these amendments, persons having resident alien status are treated the same as U.S. citizens and will not be charged for FAA certification should it occur outside the United States.

Fixed fees for airman certificates and hourly rates for assessing fees for repair station certificates are included in the regulations as a new appendix to part 187 entitled ''Fee Schedule for Certification Services Performed Outside the United States on Behalf of Foreign Nationals Other Than Resident Aliens.'' (Fixed fees could not be derived for repair station certificates because the time involved varies widely.) All fees are derived from total certification costs and include direct and indirect labor costs, overhead costs, interest recovery, depreciation, and space rent costs, where appropriate. The fees therefore implement OMB Circular No. A–25 and will recover all airman and repair station certification costs incurred by the FAA in issuing original certificates to foreign nationals.

No fees will be charged for renewing airman certificates. A fee will continue to be charged for replacing stolen or lost certificates. In addition, fees will be assessed for reissuing repair station certificates since reissuing these certificates requires considerable expenditure of FAA technical resources. However, because the technical resources expended in reissuing Inspection Authorization Certificates under § 65.91 have, upon further review, been determined to be minimal, the proposed fee for renewing these certificates is not adopted. In addition, a requirement has been added that checks tendered for fee payment must be drawn on a U.S. bank. This requirement has been added because Treasury depositaries have established minimum check amounts acceptable for deposit. Without this requirement a substantial number of checks submitted for fees would be uncollectible.

These amendments also formally establish a need requirement for issuing certificates to foreign applicants outside the United States; that is, the certificates must be needed for the operation or continued airworthiness of U.S.-registered aircraft. Foreign nationals who are resident aliens will not have to meet this requirement.

The FAA does not currently issue to foreign nationals overseas: (1) Any certificates for Pilot Schools (part 141), Ground Instructors (part 143), Aviation Maintenance Technical Schools (part 147), or Parachute Lofts (part 149), and (2) certificates issued under subparts of part 65 for Aircraft Dispatchers (subpart C), Repairmen (subpart E), or Parachute Riggers (subpart F). Consequently, those parts and subparts have not been amended to include the need requirement and other requirements included in these amendments. Subpart B of part 65 similarly has not been amended although it is understood the current practice of issuing under this subpart a limited number of air traffic control tower operator certificates overseas to foreign nationals to operate civilian/military joint-use facilities in Europe will be continued under an appropriate agreement with the Department of Defense.

Notice 81–12 proposed a 2-year validity period for each certificate issued to a foreign national who is not a resident alien. In this regard, the FAA has determined that additional information concerning this issue is needed. Therefore the proposal concerning the 2-year validity period is not adopted at this time. The FAA may, however, initiate rulemaking in this area in the future. It should be noted that withdrawing this proposal does not alter the current renewal requirements for repair station, flight instructor, inspection authorization, certain flight engineer, and student pilot certificates.

Fee Collection

For airman certificates, the FAA will collect the fees at the time of application for a certificate of rating, after first ascertaining the applicant's eligibility. The Flight Standards Office (FSO) or designated examiner will determine whether the applicant meets the need requirement and other preliminary eligibility requirements, such as age and currency. If these requirements are met, the FSO will issue a receipt as evidence of payment and forward the applicable fee to the regional accounting office serving the area. Fees must be in the form of a check, money order, or draft payable in U.S. currency to the Federal Aviation Administration and drawn on a U.S. bank. No application will be acted upon until evidence of the payment has been presented. There will be no refund of any fee payment for any examination which the applicant fails to pass. However, if an applicant notifies the FAA at least one week before a scheduled examination that he wishes it cancelled, the FAA will refund the fee payment after deducting a minimal service charge to cover the cost of processing the application.

In the case of repair station certificates, applicants will submit as prepayment the costs required for 25 hours of technical activity and 7.5 hours of clerical activity for original certification or approval of a change of location or housing of facilities, or 10 hours of technical activity and 3 hours of clerical activity for an amendment or renewal of the certificate due to an added rating or change in ownership, at the hourly rates specified in the appendix to part 187. This repayment will be processed in the same fashion as fees collected for airman certificates. If the time required in actual certification is less than 25 and 7.5 hours or 10 and 3 hours, the FAA will submit to the applicant a refund to cover the difference between prepayment and actual costs. Conversely, if the time required is greater, the applicant will be required to submit the additional funds. As in the case of airman certificates, applicants for repair station certificates must pay these fees, regardless of whether a certificate is awarded.

In Notice 81–12, the agency proposed to amend § 65.15a. That section had previously been revoked by another regulatory action and, therefore, the proposed amendment was inappropriate. Therefore, the proposal to amend § 65.15a is withdrawn.

Analysis of Comments

The FAA received 39 comments in response to Notice 81–12, 29 of which originated from the same pilot school in Belgium. Most of these comments, particularly those originating from the Belgian pilot school, argue that the proposed 2-year renewal requirement would inhibit the safe expansion of

aviation in many parts of the world by denying FAA airman certificates to many foreign nationals overseas who may not be able to demonstrate periodically that they are operating or assuring the continued airworthiness of U.S.-registered aircraft. These commenters further argue that, as a result, aviation safety would suffer, the world market for aviation products and services would decrease, and most important, the current orientation of many pilots toward U.S. products and services would be substantially reduced.

Regarding this latter effect, the commenters argue the proposed 2-year renewal requirement would decrease U.S. general aviation exports by reducing the number of pilots trained on U.S. equipment. As one commenter states, ''Foreign pilots trained on U.S.-aircraft will develop U.S.-brand loyalty, which would reflect when purchasing aircraft in their native countries'' (sic). Those foreign nationals holding FAA flight instructor certificates apparently feel that the inability of some foreign nationals to meet the continuing need requirement would cause them to seek training from foreign-certificated flight instructors who use foreign-manufactured equipment and related training aides instead of FAA-certificated instructors using U.S.-manufactured equipment and related training aides.

Other commenters disagree with the proposed renewal requirement as a safety surveillance measure as it applies to airman certificates issued under parts 61 and 63. One commenter points out that the FAA's current biennial flight review and instrument competency checks fulfill the requirement for safety surveillance and that a proposed 24-month term for a new license would appear to be a duplication of the biennial flight review.

The FAA believes that although these comments have merit as they apply to certification under part 61, similar surveillance does not exist for airmen certificated under parts 63 and 65. This amendment would have ensured greater surveillance of operations involving U.S.-registered aircraft operating outside the United States. However, unless and until it is determined that foreign nationals should be required to demonstrate a need for certification on a periodic basis, the FAA does not believe it appropriate to institute the biennial renewal requirement. Therefore, the proposal is withdrawn at this time.

Other commenters point out that at many overseas locations served by U.S. air carriers there is no FAA-certificated repair station and that it is financially advantageous for U.S. air carriers to use resident foreign nationals who are FAA-certificated mechanics rather than incur the considerably higher costs of stationing FAA-certificated U.S. citizens at these locations. Finally, they indicate that many foreign nationals may find it difficult to pay the $400 fee for original airframe mechanic certification and be deterred from applying.

Current FAA-certificated mechanics will not be required to pay the fee for a mechanic certificate or the fee for an inspection authorization certificate. While the costs of initial certification of new applicants may have to be borne directly or indirectly by the U.S. employer, the potential cost on U.S. air carriers is minimal when compared to either their total overseas maintenance costs or the costs of stationing FAA-certificated U.S. citizens overseas. Furthermore, the need for cost recovery and fiscal responsibility in government far outweighs this impact.

The FAA also considered the possibility that U.S. citizens, such as those providing humanitarian or religious services in remote overseas locations, could be impacted negatively if these proposed fees deter foreign nationals from applying for original FAA mechanic certificates. The FAA does not expect foreign nationals to be deterred from applying. The employment value of certification to the foreign mechanic far outweighs the cost of this fee, and the value of the services provided U.S. citizens far outweighs whatever small percentage of the certification cost is passed on to them. Moreover, many of these U.S. citizens are already required to register their aircraft with the Civil Aviation Authority in the country in which it is based and therefore would be unaffected by the rule.

Issuance of Medical Certificates

Notice 81–12 proposed an $8 fee for the initial issuance of FAA medical certificates. Internal FAA review has shown that administering this separate fee for medical certificates would create an excessive burden by requiring the FAA to monitor the fee collection activities of overseas designated aviation medical examiners (AME's). To avoid this problem, applicants for initial student pilot certificates issued by the FAA or by a Designated FAA Examiner will pay a single fee for airman certification which will include $8 to cover the costs of a medical certificate issued under part 67. An $8 charge will also be included into the fee for an initial certificate issued under §§ 61.75, 61.77, 63.23, and 63.42 if the applicant presents such a medical certificate as evidence of meeting the medical standards for the foreign certificate upon which the application is based.

In keeping with the decision to remove any fee collection responsibility from AME's overseas applications for students pilot certificates must now be made directly to an FAA Flight Standards Office or to a Designated FAA Examiner and cannot be made to an AME. The administrative procedures of

§ 61.85 governing applications for student pilot certificates therefore have been amended to cover only applications made within the United States.

The Amendment

Accordingly, parts 61, 63, 65, 67, 145, and 187 of the Federal Aviation Regulations (14 CFR parts 61, 63, 65, 67, 145, and 187) are amended effective October 18, 1982.

(Secs. 313, 601, 602, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1421, and 1422); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); Title V, Independent Offices Appropriations Act of 1952 (31 U.S.C. 483(a)); Sec. 28, International Air Transportation Competition Act of 1979 (49 U.S.C. 1159(b)).)

NOTE: Since compliance with these amendments will have only a minimal cost impact on the maintenance of U.S.-registered aircraft overseas and will not otherwise impose any cost or other economic burden on U.S. citizens, it has been determined that they are not major regulations under Executive Order 12291 and, for the same reason, it is certified that, under the criteria of the Regulatory Flexibility Act, they will not have a significant economic impact on a substantial number of small entities. The FAA has determined that this document involves regulations which are not significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). In addition, the FAA has determined that the expected impact on U.S. citizens of the regulations is no minimal that they do not require an evaluation.

Amendment 67–13

Organizational Changes and Delegations of Authority

Adopted: September 15, 1989 **Effective: October 25, 1989**

(Published in 54 FR 39288, September 25, 1989)

SUMMARY: This amendment adopts changes to office titles and certain terminology in the regulations that were affected by a recent agencywide reorganization. These changes are being made to reflect delegations of authority that were changed, as well as offices that were renamed or abolished and replaced with new office designations. These changes are necessary to make the regulations consistent with the current agency structure.

FOR FURTHER INFORMATION CONTACT: Jean Casciano, Office of Rulemaking (ARM–1), Federal Aviation Administration, 800 Independence Ave., SW., Washington, DC 20591; telephone (202) 267–9683.

SUPPLEMENTARY INFORMATION

Background

On July 1, 1988, the FAA underwent a far-reaching reorganization that affected both headquarters and regional offices. The most significant change is that certain Regional Divisions and Offices, which formerly reported to the Regional Director, are now under ''straight line'' authority, meaning that these units within each Regional Office report to the appropriate Associate Administrator (or Chief Counsel) in charge of the function performed by that unit.

Within part 11 of the Federal Aviation Regulations (FAR), various elements of the FAA have been delegated rulemaking authority by the Administrator. These delegations need to be updated. In addition, throughout the Federal Aviation Regulations references are made to offices that have been renamed or are no longer in existence as a result of reorganization.

Title 14 of the Code of Federal Regulations must therefore be amended to reflect the reorganizations and changes that have taken place.

Paperwork Reduction Act

The paperwork requirements in sections being amended by this document have already been approved. There will be no increase or decrease in paperwork requirements as a result of these amendments, since the changes are completely editorial in nature.

Good Cause Justification for Immediate Adoption

The amendment is needed to avoid possible confusion about the FAA reorganization and to hasten the effective implementation of the reorganization. In view of the need to expedite these changes, and because the amendment is editorial in nature and would impose no additional burden on the public, I find that notice and opportunity for public comment adopting this amendment is unnecessary.

Federalism Implications

The regulations adopted herein will not have substantial direct effects on the states, on the relationship between the National government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Conclusion

The FAA has determined that this document involves an amendment that imposes no additional burden on any person. Accordingly, it has been determined that: The action does not involve a major rule under Executive Order 12291; it is not significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and because it is of editorial nature, no impact is expected to result and a full regulatory evaluation is not required. In addition, the FAA certifies that this amendment will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

The Rule

In consideration of the foregoing, the Federal Aviation Administration amends the Federal Aviation Regulations (14 CFR Chapter I) effective October 25, 1989.

The authority citation for part 67 continues to read as follows:

Authority: Secs. 313(a), 314, 601, 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1355, 1421, and 1427.

Amendment 67–14

Pilots Convicted of Alcohol- or Drug-Related Motor Vehicle Offenses or Subject to State Motor Vehicle Administrative Procedures

Adopted: July 26, 1990 **Effective: November 29, 1990**

(Published in 55 FR 31300, August 1, 1990)

SUMMARY: This final rule sets forth regulations under which the FAA may deny an application for, and suspend or revoke, an airman certificate or rating if an individual has had two or more alcohol- or drug-related motor vehicle convictions or state motor vehicle administrative actions within a 3-year period (motor vehicle actions). The rule requires pilots to report to the FAA in Oklahoma City, Oklahoma, all alcohol- or drug-related motor vehicle convictions or state motor vehicle administrative actions that occur after the effective date of the final rule. The rule also amends the FAA's medical certification rules to include an ''express consent'' provision that authorizes the FAA to obtain information from the National Driver Register.

The rule is needed to prohibit a pilot from operating an aircraft after multiple alcohol- or drug-related motor vehicle actions. It is also needed to verify traffic conviction information required to be reported on the airman medical application and to evaluate whether the airman meets the minimum standards to be issued an airman medical certificate. The rule is intended to enhance safety in air travel and air commerce, and is necessary to remove from navigable airspace pilots who demonstrate an unwillingness or inability to comply with certain safety regulations and to assist in the identification of personnel who do not meet the medical standards of the regulations.

FOR FURTHER INFORMATION CONTACT: Mr. Robert Covell, Investigations and Security Division (ACS–310), Office of Civil Aviation Security, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3965.

SUPPLEMENTARY INFORMATION:

Background

General Statement

The Federal Aviation Regulations (FAR) have addressed the issues of alcohol and drug use by an aircraft crewmember for many years. Section 91.11 of the FAR, for example, provides for certificate action against a person who acts, or attempts to act, as a crewmember of a civil aircraft within 8 hours after consumption of an alcoholic beverage; while under the influence of alcohol; while using any drug that affects the person's faculties in any way contrary to safety; or while having 0.04 percent by weight or more alcohol in the blood. Moreover, the FAA's strong interest in ensuring that airmen are not alcohol or drug dependent is demonstrated by the medical standards contained in part 67. This rule will supplement, not replace, the current regulations. It is intended to implement measures to further ensure the safety of air commerce. This will be accomplished by identifying and removing from airspace those persons who may commit unsafe acts in an aircraft because of a disregard for certain safety regulations; by identifying those persons who fail to report violations of specific safety regulations to the FAA as required; and by providing a means for verification of information or omission of information required to be reported on the application for airman medical certification.

Regulatory History

The FAA issued a notice of proposed rulemaking (NPRM) concerning pilots convicted of alcohol- or drug-related motor vehicle offenses or subject to state motor vehicle administrative procedures on May 11, 1989 (54 FR 21580; May 18, 1989). This NPRM was issued in part to respond to the results of an audit of the FAA's airman medical certification program by the Office of the Inspector General (OIG) of the U.S. Department of Transportation (DOT) released on February 17, 1987. The OIG evaluated the procedures used by the FAA to determine if pilots applying for medical certification had reported alcohol- or drug-related motor vehicle convictions on the FAA medical application form. This information and other historical data are required of applicants for medical certification to assist the agency in determining their physical and psychological fitness to safely operate an aircraft.

The OIG used three automated files to conduct its audit: (1) An extract from a state driver licensing file on alcohol- and drug-related motor vehicle offenses; (2) an extract from the National Driver Register (NDR); and (3) the FAA's airman medical file (the Automated Medical Certification Data Base). The OIG used these files to perform two comparisons for the audit. First, the OIG compared the FAA's medical file and the state records of alcohol- and drug-related traffic offenses. This comparison showed that 1,584 of the active pilots (3.4 percent) who held a driver's license issued by the state had at least one driving-while-intoxicated (DWI) or driving-under-the influence (DUI) conviction. Of these pilots, 1,124 pilots (71 percent) did not report this information to the FAA.

The OIG also compared the FAA's medical file with the NDR records for individuals whose driver's licenses had been suspended or revoked based on alcohol- or drug-related traffic offenses. This comparison disclosed that the driver licenses of approximately 1,300 of the 711,648 active airmen (1.45 percent) had been suspended or revoked for DWI or DUI offenses within the past seven years. Of these pilots 7,850 pilots (76 percent) failed to report these motor vehicle convictions to the FAA on their medical applications. The National Driver Register Act of 1982 (NDR Act) contains statutory restrictions regarding access and use of NDR information. Thus, the OIG collected only statistical data from the NDR and did not obtain the names of specific airmen during the audit.

After the audit report was released, the OIG announced its intention to conduct two computer matches as part of an investigative effort to gather specific, detailed information (52 FR 5374; February 20, 1987) (52 FR 8545; March 18, 1987). For the first match, the OIG matched the FAA's airman medical file with certain identification records of criminal history information of the Federal Bureau of Investigation (FBI). For the second match, the OIG matched FAA's Automated Medical Certification Data Base with the State of Florida Department of Highway Safety and Motor Vehicle driver licensing records for alcohol- or drug-related traffic offenses. These one-time computer matches resulted in the identification of specific airmen who allegedly falsified applications for medical certificates by failing to report alcohol- or drug-related convictions.

The OIG reported the results of the Florida state match and the Department of Justice (DOJ) match to the FAA for possible administrative action and to the DOJ for possible criminal action based on a violation of 18 U.S.C. 1001 for intentional falsification of an application for a medical certificate.

Based on the information discovered during the audit, the OIG recommended that the FAA develop an objective, regulatory standard that would provide the FAA certificate action against pilots convicted of alcohol- or drug-related motor vehicle offenses. The OIG also recommended that the FAA seek legislative changes to the NDR statute that would give the FAA access to NDR information. The National Transpor-

tation Safety Board (NTSB) and the U.S. General Accounting Office (GAO) supported these recommendations. On December 30, 1987, the President signed legislation amending the NDR Act to add section 206(b)(3) (Pub. L. 100–223; 101 Stat. 1525). In part, that statutory amendment authorizes the FAA to receive information from the NDR regarding motor vehicle actions that pertain to any individual who has applied for an airman medical certificate.

The amendment to the NDR Act states:

> Any individual who has applied for or received an airman's certificate may request the chief driver licensing official of a State to transmit information regarding the individual . . . to the Administrator of the Federal Aviation Administration. The Administrator of the Federal Aviation Administration may receive such information and shall make such information available to the individual for review and written comment. The Administrator shall not otherwise divulge or use such information, except to verify information required to be reported to the Administrator by an airman applying for an airman medical certificate and to evaluate whether the airman meets the minimum standards as prescribed by the Administrator to be issued an airman medical certificate. There shall be no access to information in the Register under this paragraph if such information was entered in the Register more than 3 years before the date of such request, unless such information relates to revocations or suspensions which are still in effect on the date of the request.'' [23 U.S.C. 401 NOTE]

On October 22, 1987, the FAA issued a notice (52 FR 41557; October 29, 1987) of a special enforcement policy regarding applicants for a medical certificate who have provided incorrect information about traffic convictions on a medical application form. In order to encourage compliance with the reporting requirement on the medical certificate application form, and to ensure that the FAA's records are accurate and complete, the FAA afforded airmen an opportunity to avoid FAA enforcement action based on falsification of their medical certificate application if they volunteered the corrected information to the FAA before January 1, 1988. As of that date, the FAA may take enforcement action, based on falsification of the medical certificate application, against those persons who had not provided corrected information. This includes those persons identified and referred by the OIG and those persons discovered through the FAA investigative process. However, even after January 1, 1988, the determined not to take enforcement action against those persons who submitted corrected information prior to the FAA obtaining that information from other sources. On October 27, 1988, the FAA issued a notice announcing complete termination of this so-called ''amnesty'' policy, effective December 1, 1988 (53 FR 44166; November 1, 1988). Therefore, after November 30, 1988, voluntary submission of corrected information does not preclude FAA enforcement action.

The FAA received about 11,300 letters from pilots disclosing offenses previously unreported on their medical application forms in response to the October 1987 notice. The ''disclosure'' letters served in most cases to secure amnesty from FAA enforcement action for these airmen as related to the falsification issue. The disclosures, however, did not preclude the FAA from denying an application or suspending or revoking a medical certificate, as appropriate, after evaluating the disclosures and determining tat an airman was medically not qualified.

Airmen whose traffic offenses suggested the need for further medical evaluation were asked to provide the agency with all court or administrative records associated with the offenses, or records associated with any care or treatment for substance abuse or related disorders. They also were asked to undergo specialized medical evaluations, if appropriate. The airman medical files of the individuals who submitted the information were updated and reevaluated in light of the new of information to ascertain whether those airmen continued to be medically qualified to operate an aircraft in a safe manner.

Since October of 1987, the FAA has reviewed approximately 24,000 airman medical files as a result of letters from pilots disclosing offenses previously unreported and of new applications for medical certificates indicating DWI or DUI convictions. The majority of the pilots whose files were reviewed were sent letters confirming their continued eligibility to hold medical certificates. Of the 24,000 airmen, approximately 2,400 (10 percent), were requested to submit additional information. Of this 2,400 airmen, an estimated 24 (1 percent) were denied medical certificates or had their medical certification suspended or revoked.

On April 11, 1989, the FAA issued another notice of enforcement policy (54 FR 15144; April 14, 1989). This notice announced the FAA's enforcement policy in those OIG-referred cases in which the airman had not come forwarded to disclose the convictions pursuant to the amnesty policy, as well as in similar cases which otherwise may come to the FAA's attention. In all cases, the FAA reviews the individual's medical eligibility, and take action, if appropriate, whether or not the FAA takes certificate action based on falsification.

Discussion of Comments

General Statement

The FAA received 84 timely comments in response to the May 18, 1989, NPRM. Based on its analysis and review of these public comments, the FAA is adopting some of the proposed revisions to parts 61 and 67, with changes as described. A discussion of the comments follows.

In general, the majority of the comments support the safety goal of the proposed rule. Those objecting say that the methods proposed by the FAA in the NPRM do not contribute to a safer aviation community, but rather place serious regulatory burdens on those airmen who are law-abiding. Among the commenters are six organizations representing airline and pilot associations; on Federal agency, the NTSB; and seventy-seven individual members of the flying and non-flying public. The organizations include the Air Line Pilots Association (ALPA), The Aircraft Owners and Pilots Association (AOPA), the Experimental Aircraft Association (EAA), the Helicopter Association International (HAI), the National Air Transportation Association (NATA), and the National Business Aircraft Association, Inc. (NBAA).

Specific Comments

Existing Laws and Regulations

Nine commenters note that the FAA already has safety and enforcement regulations in existence. They believe the FAA should enforce rather than promulgate additional regulations. In the words of one respondent, ''[t]he rules of the road are not the same as the rules of the air . . . Alcohol is allowed up to a certain amount, while driving a car. In the case of operating an airplane, no alcohol at all is the regulation.''

The FAA agrees with the need to enforce existing safety regulations. Several commenters indicate that the rules dictating ''within 8 hours'' or ''under the influence'' are already in place and are designed to protect the public from intoxicated pilots; the agency devotes considerable resources to this purpose. However, the previously described OIG audit shows that although only a small percentage of the aviation community may be involved, there are airmen who do not comply with the existing reporting requirements. There also are some airmen who have a record of multiple convictions for DWI and DUI, indicating that not all pilots show an appropriate concern for critical highway safety requirements. It is these pilots who are the focus of the detection mechanisms established by this rule.

Lack of Supportive Evidence of Correlation

Of concern to twenty-six commenters, including all six organizations, is the lack of statistical data to support the proposals presented in the NPRM. They note the lack of a proven correlation between alcohol and drug convictions while driving a motor vehicle and alcohol- and drug-related accidents while flying an aircraft.

The FAA made no attempt to obscure the lack of evidence correlating alcohol- or drug-related motor vehicle actions with substance abuse-related accidents or incidents while operating an aircraft. The FAA notes, however, that from 1978 to 1987, 6.0 percent of general aviation pilots killed in aviation accidents had a blood alcohol level of 0.04 percent or more. During that same period, 11,213 people died in general aviation accidents. If the rule were to result in the saving of a few lives, the potential benefits of the rule would exceed its potential cost.

If, for example, 6.0 percent of average annual deaths in general aviation accidents occurred in circumstances where alcohol may have been a contributing factor and the rule were only 1 percent effective in preventing such accidental deaths, then the benefits of the rule (given the values currently ascribed to a statistical life) would exceed its potential costs. FAA believes, in fact, that the rule will be significantly more effective than 1 percent so that potential benefits are likely to significantly exceed costs.

Therefore, FAA needs to develop an objective, regulatory standard that will enable the agency to take certificate action against convicted of alcohol- or drug-related motor vehicle offenses. Similarly, the FAA has a clear safety basis for ensuring that an applicant for a medical certificate fully and accurately completes the application so that the individual can be evaluated in accordance with the medical standards.

In light of the FAA's statutory mandate to protect and enhance aviation safety, the FAA elects to adopt the majority of the proposals in the NPRM. The potential consequence to aviation safety and the public interest of individuals with a recent history of DWI or DUI offenses piloting aircraft is at least as serious as for those driving motor vehicles, a situation demonstrated daily on our nation's highways. The agency believes that an individual whose conduct results in multiple alcohol- or drug-

related motor vehicle actions within a 3-year period should be subject to enforcement action with the potential for removal from the flying environment.

Difference Between Piloting an Aircraft and Driving an Automobile

Numerous objections to the proposals in the NPRM assert that there is little or no relationship between the task of piloting an aircraft and driving an automobile. The commenters contend that training and the environment surrounding the operations of motor vehicles and aircraft are drastically different and should not be subject to similar regulations. The commenters state that pilots are carefully selected and subject to different medical requirements and training than those licensed solely to operate motor vehicles, and, therefore, cannot be so directly equated.

The FAA is well aware that there are differences in training for motor vehicle and aircraft operation. However, driving an automobile on our nation's roads requires some type of state medical examination, at a minimum an eye examination, as well as a statement of health from the applicant or driver. Commercial drivers usually undergo medical examinations while private automobile drivers usually must self-certify and take a vision test. Applicants must respond to questions concerning their prior driving records and medical status and must also demonstrate practical driving skills. These conditions have been an acceptable part of obtaining a driver's license for the vast majority of adult Americans who undergo this procedure regularly. Similar procedures are required for those choosing to pilot aircraft.

The FAA agrees with the commenters that a higher level of skill and care must be exercised by those piloting aircraft in the interest of the public. In comparison to driving, aviation-related errors in judgment can be more serious; there is potential for greater property damage; and a pilot, particularly when engaged in commercial aviation, is responsible for the safety of passengers as well as for others both in the air and on the ground.

Legal Concerns

Numerous commenters raise issues that they believe are legal in nature. Three commenters argue that the proposed regulations overstep FAA's statutory authority, which involves the safety of flying. They believe that FAA regulations should address only the act of flying while under the influence of alcohol or drugs.

The FAA does not agree with these commenters. Information about a person's driving record, including DWI and DUI offenses, has long been required as a part of the application process for airman medical certification. Moreover, the FAA believes that conduct outside the time actually spent flying can be relevant to a determination of a person's capability to pilot an aircraft. Multiple driving convictions or administrative actions involving alcohol or drugs have relevance to the issues of judgment, compliance disposition, and medical qualifications.

Twenty-three commenters, including three organizations, oppose the NPRM on the basis of its intrusive nature. They argue repeatedly that since there is no statistical evidence to support the linking of a pilot's past driving record with his or her potential for alcohol or drug use in the cockpit, very little relevance exists for requiring access to the records in the NDR. As a result, it is argued that such a requirement by the FAA is, by nature, an invasion of privacy. Several commenters say that until definite proof is presented linking the two types of operation, no justification exists for the proposals.

The FAA acknowledges that there may be an impact on the privacy of individuals by virtue of obtaining the information in the NDR, but the impact is neither large nor unwarranted. First, most information in the NDR is public record information from the participating states. Second, the medical application already requires an applicant to reveal his or her driving record. Therefore, accessing the information in the NDR should not result in developing any new information about the applicant. Third, Congress passed legislation explicitly granting the FAA the authority to receive information contained in the NDR. The legislation contains limitations that safeguard the privacy interests of individuals whose NDR records are disclosed to the FAA.

Regarding the express consent form to be attached to the medical application for use in obtaining NDR information, one commenter states that the FAA's obtaining ''express consent by a deliberate and knowing act of administrative extortion'' is without statutory authority. This commenter believes that it is inappropriate to withhold issuance of a medical certificate if a person refuses to give consent to access the NDR.

The FAA does not agree. Indeed, the statute granting the FAA authority to receive NDR information tied the use of the information specifically to the medical certification process. The statute provides that that information is to be used ''to verify information required to be reported to the Administrator by an airman applying for an airman medical certificate and to evaluate whether the airman meets the

minimum standards as prescribed by the Administrator to be issued an airman medical certificate.'' [23 U.S.C. 401 note]

Numerous commenters said that pilots' constitutional rights would be violated because there is no opportunity for a hearing or appeal following ''automatic'' certificate action for two DWI convictions.

The FAA does not agree. This rule provides that multiple motor vehicle actions against a person within a 3-year period are grounds for suspension or revocation of any certificate or rating issued to that person under part 61. There is no ''automatic certificate action.'' Rather, the FAA will initiate appropriate enforcement action, and the FAA's normal enforcement procedures will be followed. An airman will be afforded all of the procedural safeguards that are available generally in FAA certificate action proceedings. These proceedings could include notice of proposed certificate action and, possibly, a hearing before an administrative law judge, an appeal to the National Transportation Safety Board and, finally, judicial review of the determination.

Three commenters, including two organizations, state that retroactive enforcement is unfair. They note that pilots would have exercised more caution against receiving a DWI or DUI conviction if they had known such convictions might affect their pilots' licenses.

The FAA recognizes this concern. Under the proposed rule, at least one motor vehicle action would have had to occur after the effective date of the final rule. However, possible loss of an airman certificate is not the reason a person should comply with state laws related to alcohol or drug use in operation of a motor vehicle. Those alcohol- and drug-related highway safety laws should be adhered to because they are the law. The failure to comply has serious adverse consequences. Alcohol- and drug-related traffic accidents result in the deaths of thousands of Americans every year. While other traffic offenses may result in accidents, alcohol and drug impairment clearly pose the greatest threat and are the result of conscious decisions. Motor vehicle actions reflect a lack of safety awareness, a lack of good judgment, and an indifference to the adherence to established requirements of law. Nevertheless, the FAA recognizes that directly linking an individual's compliance disposition toward critical safety requirements in the driving context to possible certificate action against that individual's pilot certificate is a fundamental change. The FAA agrees that the correlation should be prospective and has so provided in this final rule. To the extent that the rule has a deterrent effect, resulting in a proper compliance attitude toward the FAR, the rule will have achieved its goal.

Ten commenters, including three organizations, suggest that, in the words of one individual, the ''rule is using a flawed base for its determinations'' because DWI or DUI convictions are based on substantially different state laws. These differences include varying permissible blood alcohol concentrations (BAC) and differing state procedures for those charged with DWI or DUI offenses. Therefore, these commenters argue that the proposed rule could not be applied equally to all airmen.

The FAA is aware of impairment level and procedural differences among the states. However, these differences in state laws and procedures, which are a part of our Federal system, are not a reason for inaction. Every person driving an automobile is required to obey the laws of the state in which the vehicle is being operated. The fact that state laws differ is not a defense to charges of violating a law, nor do state law differences undermine a rule that uses convictions or state administrative actions under those varying laws. In the NPRM, the FAA requested specific comments on whether to treat state judicial proceedings involving ''probation before judgment'' and ''deferred adjudication'' as a ''motor vehicle action'' even though these proceedings may not result in a permanent record of conviction. The FAA agrees with a commenter who recommends that procedures such as probation before judgment and deferred adjudication not be considered motor vehicle actions. Further evaluation is needed of the possible impact on state procedures of including judicial proceedings that do not result in a conviction as a motor vehicle action under the rule. As defined in the rule, a motor vehicle action is a conviction; license cancellation, suspension, or revocation; or the denial of an application for a license to operate a motor vehicle by a state for a cause related to the operation of a motor vehicle while intoxicated by alcohol or a drug, while impaired by alcohol or a drug, or while under the influence of alcohol or a drug.

Finally, two commenters, including one organization, note that the Federal Highway Administration (FHWA) regulations refer only to ''on duty'' alcohol-and drug-related motor vehicle actions. The FHWA rule initially was broader, and included off duty convictions for operating a vehicle under the influence of alcohol. These commenters refer to a judicial decision involving the initial rule, *Whalen v. Volpe,* 348 F. Supp. 1235 (D. Minn. 1972), in which the court concluded that the FHWA rule was arbitrary, capricious, and unreasonable. The court found an absence of any rational basis to conclude that there was a correlation between a conviction for drunken driving while in a private automobile and future conduct driving commercial vehicle. The decision was vacated later based on a stipulation and agreement entered into by the parties, *Whalen v. Volpe,* 379 F. Supp. 1143 (D. Minn. 1973), and FHWA engaged

in further rulemaking. These commenters do not believe that the FAA reasonably can proceed to a final rule in light of the Whalen case.

The FAA is not persuaded that the Whalen case precludes promulgating a final rule in this rulemaking. Since the decision was vacated it has no precedential value. Moreover, there are significant distinctions between the FHWA rule and that agency's statutory authority and the FAA's rule and its statutory authority. The FAA believes that the Whalen rationale is no longer persuasive and that there have been significant changes in the recognition of the dangers of driving while impaired by drugs or alcohol and the reasonable inferences that can be drawn from such conduct about a person's judgment and compliance disposition. The effects of substance abuse on the safety of transportation are clear and the courts have recognized the authority of government agencies to take action to prevent these effects. Therefore, the FAA is not persuaded that a court today would reach the same conclusion that was reached by the court in the *Whalen* case.

Self-Policing

Eighteen commenters, including two organizations, believe that only a small segment of the flying population abuses drugs or alcohol. The commenters argue that the overwhelming majority of the pilot population is already doing an excellent job of self-policing; thus this rule is unnecessary.

The FAA agrees that the majority of the pilot community complies with the regulations by self-policing. The FAA accepts, and has so stated, that only a small percentage of the airman population may be affected by the abuse of alcohol or drugs. However a single impaired or intoxicated pilot could cause extensive and wide-spread damage to the public through loss of life or property damage. The FAA believes that this regulation will encourage greater self-policing and intends it to be primarily corrective in nature, assisting the agency, through deterrence, in attaining its primary mission, that of aviation safety.

Enforcement

Nineteen commenters say that they believe the FAA has become irrationally harsh in its enforcement policy, not improving compliance, and damaging the FAA's credibility. They state that this rule is one more step in this onerous direction.

The FAA's compliance and enforcement programs have been modified recently. The opinions of the flying population, particularly general aviation pilots, have been taken into consideration in the agency's on-going effort to maintain a high level of safety. There will be continued insistence on total compliance with the rules and regulations that have made our aviation system as safe as it is. But agency responsibility to enforce the rules will not prevent the FAA from addressing the aviation community's concerns and enhancing the FAA's responsiveness to the users of the system. The goal is to be firm but fair. The FAA intends to use a number of tools, including good communications, training, education, counseling, and finally enforcement, to achieve the primary goal of safety.

The FAA has become aware that there is a good deal of misunderstanding about the enforcement process, leading to a sense of mistrust. Therefore the new enforcement procedures will be more flexible, with greater emphasis on promoting compliance through education and open communication. The FAA will consider the need for simplification in some of the regulations to enhance understanding and promote compliance.

Nevertheless, clear-cut violations of regulations and a lack of compliance disposition must be handled decisively in the interest of promoting safety, particularly in such safety-sensitive areas as alcohol and drug abuse. The FAA regards violations in these areas as serious and will continue to expect strict adherence to the regulations. As stated in a recent FAA notice of enforcement policy (54 FR 15144; April 14, 1989), failure to disclose DWI or DUI convictions when applying for an airman medical certificate may be a violation of § 67.20 of the FAR. In pertinent part, that section provides that no person may make or cause to be made any fraudulent or intentionally false statement on any application for an airman medical certificate; so doing is a basis for suspending or revoking any airman certificate or rating held by that person.

Persons who make false statements on an application for an airman medical certificate also may be criminally prosecuted under 18 U.S.C. 1001, which carries a fine of not more than $10,000 or a term of imprisonment for up to 5 years, or both. While the FAA refers cases for consideration, the Department of Justice determines whether to prosecute a person under this statute.

Punishment

Twenty-one individuals and two organizations provided comment on the allegedly punitive nature of this rule. Seven commenters and one organization believe that the regulation should be more stringent, to include such issues as suspension of a pilot's license for a single DWI conviction.

The FAA considered basing enforcement on a single-drug or alcohol-related motor vehicle action, but chose not to do so because there are existing procedures that call for the review of any medical application in which the applicant discloses a past motor vehicle action. This review could lead to further action resulting in the denial, suspension, or revocation of a medical certificate. This review takes place at the time of the initial submission of a medical application, and is performed by the Aviation Medical Examiner (AME), followed by an additional agency review. Regarding the falsification issue, there is an existing FAR (§ 67.20) governing the providing of accurate information to the FAA, and Federal legislation exists (18 U.S.C. 1001) to address the criminal aspect of providing false information.

On the other hand, 13 commenters objected to the NPRM, making the argument that the ''punishment'' resulting from this rule is harsh and excessive. An airman certificate is required of all pilots; in the case of professional pilots, suspension or revocation would deprive them of their livelihood. This treatment, according to the arguments of the commenters, is too severe in comparison to other industries.

The FAA agrees that certificate suspension or revocation is a severe action, but one that fits the seriousness of the violation involved. The intent of these regulations is primarily corrective in nature, and to achieve the FAA's mandate to ensure safety in aviation. Therefore, the FAA will take appropriate enforcement action where pilots have violated laws related to substance use or abuse while operating a motor vehicle.

One organization states that virtually every pilot subject to an alcohol-or drug-related motor vehicle action will challenge any prosecution to the fullest extent of the law. While the FAA has no reason to doubt the comment's assertion there are ample reasons to contest a DWI or DUI charge apart from the action being taken in this rule. The decision to challenge a criminal or administrative charge is an option available to any individual in our society. If a pilot's record is reviewed pursuant to § 61.15 for possible denial of an application for a certificate or a rating, or suspension or revocation of an existing airman certificate or a rating, it is because the pilot has violated an FAA regulation. The opportunity for due process, as always, is available both in a state's criminal and administrative proceedings and the FAA's administrative proceedings.

Medical Examination Form

As adopted, this rule amends § 61.15 to require a pilot to report to the agency's Civil Aviation Security Division in Oklahoma City each alcohol-or drug-related motor vehicle conviction or administrative action that occurs after the effective date of the rule. This reporting requirement is unrelated to the existing requirement that a pilot fully and completely answer all questions related to traffic and other convictions on an *Application for an Airman Medical Certificate or Airman Medical and Student Pilot Certificate,* FAA Form 8500–8. One commenter contends that this requirement to describe any previous record or convictions should not be necessary as he is ''. . . at a loss to see the relevance between an airman making an illegal U-turn and his/her medical history.

The FAA considers an airman's conviction history pertinent to the medical certification process. An Aviation Medical Examiner (AME) uses this information, combined with the physical examination findings, as an important diagnostic tool. A history of traffic or other convictions may indicate a medical problem or may lead to further inquiry regarding an applicant's medical qualifications. While an illegal U-turn conviction, in and of itself, may not alert an AME to a possible medical problem, multiple traffic convictions might. Any reportable conviction information, coupled with a DWI or DUI conviction, could raise a question as to the applicant's fitness to perform the duties or exercise the privileges of an airman certificate. Given all the information, an AME and the agency can more accurately assess a pattern of behavior that may be indicative of a personality disorder that has repeatedly manifested itself by overt acts and, thus, may warrant denial of an application for, or suspension or revocation of, an airman's medical certificate.

Another commenter states that nowhere on the FAA Form 8500–8 does the seriousness of failing to disclose convictions appear. The agency refers that commenter to the lower left-hand corner of the form which contains a notice describing penalties for falsification or failure to disclose the information required.

Still other commenters believe that the possibility of an applicant overlooking a question, or of making an error in his or her response, is compounded by placing the conviction information the FAA is seeking within a small area in the medical history section of the form.

Data released on February 17, 1987, based on an audit conducted over a 7-year period by the OIG, indicate that more than 98.5 percent of the pilot population with convictions to report have done so successfully using the current form. The FAA, however, recognizes the merit of the commenters' desire to improve FAA Form 8500–8 to achieve an even higher degree of compliance and clarity and, thus, to lessen the opportunity for error.

At this time, the FAA is revising the current form for consistency with the amendment to part 67 as adopted in this final rule. The express consent provision is added to the form and is placed above the space provided for the applicant's signature. This provision allows the FAA to receive information about the applicant that has been reported to the NDR.

Along with the addition of the express consent provision, the agency is taking the opportunity to incorporate those suggestions that it deems will enhance the appearance and clarity of the form. Changes, in part, include revising the instructions for filling out the form; increasing the type-size, where possible; moving the conviction items to a more prominent location within the medical history section; and updating the portion that deals with penalties for falsification. The agency believes that these revisions will enable more applicants for an airman medical certificate to provide the required information accurately and with less effort.

Rehabilitation and Education

Several commenters believe there should be provisions made for rehabilitation and education. According to the commenters, the time and effort which the FAA would spend with this program would be better spent in developing and encouraging rehabilitation programs. The FAA is described by the commenters as more concerned with taking punitive measures taken to remove the offending individuals from the aviation community than with taking a more humane, restorative approach of ''compassionate intervention and rehabilitation.''

The FAA accepts and endorses education and rehabilitation as important and necessary facets of any drug or alcohol program. In fact, the agency has an active and successful employee assistance program (EAP). The FAA encourages the creation and use of industry EAPs. The FAA also encourages individuals to seek help if they have a substance abuse problem. Community health organizations generally have programs to assist such individuals. However, the primary mission of the FAA is aviation safety and the identification of associated safety problems.

Paperwork Burden

Four commenters say that this regulation would cause an undue paperwork burden on the FAA.

There admittedly will be an increase in workload among the various offices responsible for implementation of this rule. However, the agency believes that the potential for increased safety in the aviation community justifies the additional burden. Every effort will be made, however, to reduce the burden of the agency's new recordkeeping requirements. For example, in revising the application for medical certification, FAA Form 8500–8, the NDR access express consent provision will be printed on the form itself, thus eliminating an extra document that must be retained by the FAA. A detailed listing of the reporting and recordkeeping requirements can be found in part IV of the Regulatory Evaluation which is contained in the docket.

Insufficient Reporting Time

Several respondents note that pilots should be given more than 60 days to report past alcohol- or drug-related driving convictions and administrative actions. They contend that 60 days from the effective date of the final rule does not allow sufficient time for a pilot to learn of the promulgation of the regulation and then to report past motor vehicle actions. One organization suggests pilots might find it necessary to contact state officials, determine the nature of certain prior state actions, and then seek counsel on whether reporting of a specific action is required under the regulations.

Although the NPRM proposed the reporting of each alcohol- or drug-related motor vehicle action received in the 3-year period prior to the rule, this provision is not being adopted. The final rule requires only reporting of alcohol- and drug-related motor vehicle convictions or state administrative actions received after the effective date of the rule. The notification of each motor vehicle action must be received by the agency within 60 days after the conviction or administrative action. Given the deletion of the requirement to report motor vehicle actions that occurred in the 3-year period prior to the effective date of the final rule, the FAA believes that the 60-day notification period is realistic and reasonable. In addition, the effective date of the final rule is 120 days after publication in the *Federal Register*. This fairly lengthy period should provide ample opportunity for the final rule requirements to be made widely known.

Proposed Amendment to § 61.23, Duration of Medical Certificates

The NPRM proposed amending § 61.23 by adding new paragraph (d) to change the duration of an airman medical certificate. The proposed amendment provided that any medical certificate would expire automatically on the 61st day after a pilot was convicted of, or a state had taken administrative action on, a single alcohol- or drug-related motor vehicle violation, unless the medical certificate would otherwise expire before the 61st day. The pilot could continue to operate an aircraft for 60 days after the date of conviction or until expiration of the certificate, if earlier, as long as the pilot was not otherwise disqualified under part 67. The pilot could schedule and complete a new medical examination anytime after the date of the motor vehicle action. If the pilot chose to reapply within 60 days after the conviction, and, if based on this examination and the agency's review of the conviction or administrative action, the pilot continued to meet the medical standards of part 67, then he or she would be issued a new medical certificate and could continue to pilot an aircraft without interruption.

In addition, the NPRM proposed in new paragraph (d)(1) that each applicant be required to present to the AME, at the time of application and medical examination for a new certificate, any documents that substantiated participation in any court-ordered substance abuse treatment plan, and in new paragraph (d)(2), that each subject applicant be required to show the AME evidence of compliance with any other court-ordered program related to the conviction, such as community-service.

Numerous commenters contend that no measure should be taken to deny an application for, or suspend or revoke, an airman's medical certificate for a single DWI or DUI conviction or action but, rather, the airman should continue to be required to report convictions on the medical application from as a basis for further medical evaluation. The commenters support the FAA's efforts to deny medical certification to airmen with disqualifying alcohol- or drug-related medical conditions, but argue that a medical diagnosis seems unlikely based solely on a single alcohol- or drug-related motor vehicle conviction or state administrative action. Still others question the premise that, based on a single DWI or DUI action, the agency would discover pilots with alcohol or drug problems. These commenters believe that if the agency considered this proposition likely, the proposed amendment to § 61.23 would not have been drafted to allow such individuals the latitude to continue to pilot an aircraft for up to 60 days without having to undergo a medical evaluation.

Some commenters have taken the FAA to task over the requirement in the proposed rule to have the AME evaluate court and other administrative records, presented by the examinee, to determine compliance with any court-ordered program related to a conviction. These court-imposed programs could vary from attendance in a substance-abuse treatment program to participation in a community service program. Other commenters, themselves physicians, also express grave reservations over this issue. They believe that the AME would be placed in the unfamiliar role of reviewer and verifier of legal documents, and would further have to attempt to determine if the sanctions imposed had been, or were being, discharged accordingly.

The FAA has considered the commenters' views regarding the likelihood of obtaining significant results from requiring a pilot to reapply for a medical certificate after a single motor vehicle action (DWI, DUI, or state administrative action). The agency agrees that only rarely would a medical examination triggered as a result of a single motor vehicle action provide a basis for a diagnosis of alcoholism or drug dependency. The additional examinations that would have been triggered by the proposed requirement would be a significant increase in workload to the agency and an expenditure of community medical resources; conservatively, the FAA estimates that 7,000 additional applications for medical certification would be processed annually. Also of consequence would be the fees to be paid by the airmen in compliance with the reexamination requirement. If the findings from the additional examinations prove minimal, as expected, then imposing these requirements appears to be unwarranted.

The FAA has further determined that the provisions as proposed in § 61.23(d)(2) are beyond the scope of Current AMEs' training or expertise. It is FAA policy that every DWI or DUI conviction or state motor vehicle administrative action noted on an application for an airman medical certificate be reviewed by the Aeromedical Certification Division of the Civil Aeromedical Institute (CAMI) for indications of a condition warranting denial of an application or suspension or revocation of a medical certificate. This includes an additional medical review when multiple motor vehicle actions are listed on an application for a medical certificate. Two motor vehicle actions within 3 years, as provided by new § 61.15(d), still will provide grounds for certificate action against a pilot's airman certificate apart from any additional medical review. Thus, after considering all the comments received, the FAA has not adopted in this final rule the proposed amendment to § 61.23.

Pursuant to new § 61.15, the agency requires that a pilot report each alcohol- or drug-related motor vehicle conviction or administrative action that occurs after the effective date of the rule to the Civil Aviation Security Division (CASD) in Oklahoma City. The report of a motor vehicle action will result

in a review of that pilot's medical file to determine if there is a basis for reconsideration of the individual's eligibility for medical certification.

The FAA is confident that the early identification mechanisms currently in place, the new reporting requirement, and the scheduled crosscheck of the airman medical records with the NDR, are sufficient to maintain the requisite high level of safety for the aviation community and the traveling public. Thus, the FAA has concluded that limiting the duration of a medical certificate after a single motor vehicle action is not warranted.

Costs

Four commenters, including one organization, raise economic issues. Three say that the administrative paperwork would not be ''nominal'' and that the FAA should attempt to quantify these costs. The FAA agrees, and has specified the step-by-step process, with the costs involved in each step, in Section IV of the Regulatory Evaluation.

Two of the commenters say that the loss of pilot employment or pay resulting from this rule should be considered as a cost of this rule. The FAA disagrees because this rule merely identifies those pilots already having received alcohol- or drug-related motor vehicle convictions or administrative actions. Any cost is related to these pilots' own actions rather than the FAA's actions.

One commenter notes that the FAA stated in the NPRM that the loss of employment is not a regulatory cost and ''that the proposed rules would not have a significant economic impact . . . on a substantial number of small entities.'' This commenter asked whether a pilot is considered a small entity. The quoted language is based on the Regulatory Flexibility Act of 1980 (RFA) and comes from the Regulatory Flexibility Determination section of the NPRM. The FAA is required to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The criteria for a ''substantial number of small entities'' is one-third of the small firms subject to the final rule, but no fewer than 11 firms. This commenter understood ''small entity'' to mean an individual pilot, instead of a small firm. A firm, regardless of size, is made up of employees. In this case, the small firm being referenced here is made up of pilots and other employees. The loss of employment for an individual pilot may or may not have a ''significant economic impact . . . on a substantial number of small entities.'' In this case, the FAA has determined that this rule would not have such an impact.

Section-By-Section Discussion of the Rules

Several changes from the NPRM language have been made in the final rule. Some differences are intended to improve clarity; others are of a more substantive nature.

§ 61.15 Offenses Involving Alcohol or Drugs

Section 61.15(c) of the final rule has been modified to reflect that only motor vehicle actions that occur after the effective date of the rule must be reported to the FAA. The proposed rule had referenced reporting responsibility in the pilot's recent past as well as after the effective date. Reporting alcohol- or drug-related convictions or state motor vehicle administrative actions in the recent past is not a requirement of the final rule. This change is also reflected in paragraphs (d) and (e).

A modification was made to § 61.15(d) of the final rule to reflect that multiple motor vehicle actions as defined in the rule resulting from the same driving incident or factual circumstances will be viewed as one motor vehicle action for purposes of § 61.15(d). However, a pilot still must report each action to the FAA, regardless of whether it arises out of the same driving incident or factual circumstance. As part of the pilot's description of the action, the pilot should note that the action being reported is part of a single set of factual circumstances and reference any prior action arising out of the same facts.

Section 61.15(e) of the final rule differs from the proposed rule in the address to which the information must be sent. This has been changed from the Airman Certification Branch to the Civil Aviation Security Division.

Section § 61.15(f)(1) of the final rule differs from the proposed rule § 61.15(e(1)) in one minor respect. The final rule provides that the denial of any application for a certificate for a 1-year period dates from ''the date of the last motor vehicle action'' as compared to the proposed rule language which states ''the date of the failure to report a motor vehicle action.''

§ 61.23 Duration of Medical Certificates

The NPRM proposed amending § 61.23 by adding a new paragraph (d) to change the duration of an airman's medical certificate. This requirement has not been adopted in the final rule.

§ 67.3 Access to the National Driver Register

Two minor changes were made to this section. First, the rule has been changed to clarify that a person desiring to review the NDR information must request that the Administrator make the information available. Second, additional language has been added to clarify that the consent authorizes the Administrator to request the chief driver licensing official of the state to transmit information contained in the NDR about the person to the Administrator. Finally, certain editorial changes in the final rule have been made for clarity.

Paperwork Reduction Act

Section 61.15(d) would require a pilot to report to the FAA each alcohol- or drug-related motor vehicle conviction and each alcohol- or drug-related state administrative action. Information collection requirements in the amendment to § 61.15(d) have been submitted for approval to the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96–511).

Regulatory Evaluation Summary

Executive Order 12291, dated February 17, 1981, directs Federal agencies to promulgate new regulations or modify existing regulations only if the potential benefits to society for the regulatory changes outweigh the potential costs to society. The order also requires the preparation of a Regulatory Impact Analysis of all ''major'' rules except those responding to emergency situations or other narrowly-defined exigencies. A ''major'' rule is one that is likely to result in an annual effect on the economy of $100 million or more, a major increase in consumer costs, or a significant adverse effect on competition.

This final rule is determined not to be ''major'' as defined in the Executive Order, therefore a full Regulatory Impact Analysis evaluating alternative approaches is not required. A more concise Regulatory Evaluation has been prepared, however, which includes an analysis of the economic consequences of the regulation. This analysis has been included in the docket, and quantifies, to the extent practical, estimated costs as well as the anticipated benefits, and impacts.

A summary of the Regulatory Evaluation is contained in this section. For a more detailed analysis, the reader is referred to the full Evaluation contained in the docket.

The final rule establishes a basis for the denial of an application for a pilot certificate and a basis for the revocation or suspension of a pilot certificate for pilots convicted of alcohol- or drug-related motor vehicle offenses or for pilots penalized as a result of state administrative action for cause. Under this final rule, a pilot must report to the FAA any conviction or administrative action that occurs after the effective date of the rule. Failure to report even one conviction or administrative action to the FAA is grounds for denial of an application for an airman certification and grounds for suspension or revocation of a certificate issued under part 61. This reporting requirement is distinct from the existing requirement to report traffic and other convictions on an application for an airman medical certificate.

The FAA's denial of an application and the suspension or revocation of an existing certificate will be based on two or more alcohol- or drug-related motor vehicle convictions, two or more administrative actions by a state for cause, or at least one conviction and one administrative action occurring within a 3-year period.

This final rule amends Section 61.15 of the Federal Aviation Regulations (FAR) and affects an estimated 752,000 individuals currently holding active medical certificate in conjunction with student, private, commercial, airline transport, glider-only, and lighter-than-air pilot certificates and ratings issued by the FAA. Promulgation of this final rule could result in the denial, revocation, or suspension of the privilege to operate an aircraft for an estimated 1,000 to 12,000 pilots annually. The costs of suspension or revocation of a certificate issued under part 61 will be the negative economic impact associated with the temporary or permanent loss of employment for pilots engaged in commercial aviation. The FAA does not consider this a cost of the rule; rather it considers these costs to be the result of alcohol or drug use in connection with the operation of a motor vehicle.

The FAA has calculated the present value cost of this rule to be $4,409,794, discounted over a 10-year period, in 1988 dollars. The vast bulk of these costs are internal FAA administrative costs and will not be borne by the individual pilots. The costs occurring in the first year are estimated to be $1,116,864, in the second year are estimated to be $670,765, and in each subsequent year are estimated to be $644,158.

The FAA has incorporated a consent provision in the FAA medical application form (Form 8500–8, the *Application for Airman Medical Certificate or the Airman Medical and Student Pilot Certificate)* for use in searching for alcohol- or drug-related convictions or administrative actions reported to the

National Driver Register (NDR). This consent will allow the FAA to query the NDR about every pilot who applies for an airman medical certificate.

Based on the requirements of the final rule, airmen will have 60 days to send a letter to the Civil Aviation Security Division (AAC–700) with their name, airman certificate number, and information about any DWI or DUI conviction or state administrative action acquired after the effective date of the rule.

Depending on the certificate held or the operations conducted, each pilot must have a physical examination every 6 months, 1 year, or 2 years; at that time, the following screening/checking process will begin for that pilot. An average of 10,000 pilots per week undergo FAA physicals. Thus, the FAA facility in Oklahoma City processes the 10,000 applications for medical certification per week. A tape with the pilot data will be sent each week, through the appropriate agencies, to the NDR. The NDR will match this tape against its register, and will create a tape of any pilot data entries that agree. This information will then be returned to the FAA, and will be used to obtain the necessary state driving records. The resulting data on the estimated 200 pilots per week will be compiled for comparison with medical history data and with the disclosures required for § 61.15.

The FAA expects that this rule will reduce the number of aviation accidents caused by pilots who may be impaired by alcohol or drugs during aircraft operations. However, the FAA has been unable to directly quantify the expected benefits of the final rule. Some observations can be made, however, regarding potential benefits. During the period from 1978 to 1987, 6.0 percent of general aviation pilots killed in aviation accidents had a blood alcohol level of at least 0.04 percent. During this same 10-year period, 11,213 people died in general aviation accidents. If 6.0 percent of these people died in accidents where the pilot was under the influence or impaired by alcohol, over 670 people died in accidents where alcohol may have been a contributing cause.

Based on this analysis, and using $4.4 million as the present value 10 year cost of the rule, the chart below shows the cost of saving one life as a function of the effectiveness of the rule in preventing accidents.

Effectiveness of rule (%)	Cost of Rule per life saved (Dollars)
1	$640,000
10	64,000
20	32,000
30	21,300
40	16,000
50	12,800
60	10,700
70	9,000
80	8,000
90	7,100
100	6,400

At this time, the FAA cannot accurately predict how effective the rule will be in preventing fatalities such as discussed above. Even if it proves to be only one percent effective, however, the cost per fatality prevented appears to be less than values currently ascribed to a statistical life. The FAA believes that the rule will be more effective than one percent and concludes that the potential benefits of the rule will exceed potential costs.

Four commenters raise economic issues based on the cost/benefit analysis in the Notice of Proposed Rulemaking (NPRM). A discussion of these comments is contained in the final Regulatory Evaluation contained in the docket and elsewhere in the preamble to the rule.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by Government regulations. The RFA requires Federal agencies to review rules which may have a ''significant economic impact on a substantial number of small entities.''

The FAA's criterion for a ''substantial number'' are a number which is not less than 11 and which is more than one third of the small entities subject to the rule. For air carriers, a small entity has been defined as one who owns, but does not necessarily operate, 9 or less aircraft. The FAA's criterion for a ''significant impact'' are at least $3,800 per year for an unscheduled carrier, $53,500 for a scheduled

carrier having an airplane or airplanes with only 60 or fewer seats, and $95,800 per year for a scheduled carrier having an airplane with 61 or more seats.

The FAA has determined that the rule will not have a significant economic impact, positive or negative, on a substantial number of small entities. The basis of this determination is the FAA's opinion that any adverse economic consequences associated with the loss of the privilege to operate an aircraft for aviation pilots convicted of alcohol- or drug-related motor vehicle offenses or penalized as a result of state administrative action for cause is the direct consequence of alcohol or drug use in connection with the operation of a motor vehicle and not as a result of the rule. Since there are minimal economic consequences due to the rule, the total costs that could be attributable to a significant number of small entities are below the threshold dollar limits.

Trade Impact Statement

This final rule will affect only those individuals who hold an FAA-issued airman certificate and, therefore, would have no impact on trade opportunities for U.S. firms doing business overseas or foreign firms doing business in the United States.

Federalism Implications

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this regulation is not a major regulation under the criteria of Executive Order 12291. In addition, the FAA certifies that this regulation will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This regulation is considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). A regulatory evaluation of the regulation, including a Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under ''FOR FURTHER INFORMATION CONTACT.''

The Amendments

In consideration of the foregoing, the Federal Aviation Administration amends part 61 and part 67 of the Federal Aviation Regulations (14 CFR parts 61 and 67) effective November 29, 1990.

The authority citation for part 67 is revised to read as follows:

Authority: 49 U.S.C. app. 1354(a), 1355, 1421, and 1427; 49 U.S.C. 106(g) (Revised Pub. L. 97–449, January 12, 1983).

Amendment 67–15

Medical Standards and Certification

Adopted: September 1, 1994 **Effective: September 9, 1994**

(Published in 59 FR 46706, September 9, 1994)

SUMMARY: This final rule restates the general medical condition standards for first-, second-, and third-class airman medical certificates. In determining an applicant's eligibility for medical certification, the FAA's longstanding policy and practice have been to consider an applicant's medication and other treatment under the general medical conditions standards. In a recent decision by the U.S. Court of Appeals for the Seventh Circuit, however, the court found that the general medical condition standards cannot be interpreted to provide a basis for disqualification due to medication alone. This emergency final rule is, therefore, necessary to restate the general medical condition standards for an individual whose medication or other treatment makes or is expected to make that individual unable to safely perform the duties or exercise the privileges of an airman certificate.

DATES: Effective September 9, 1994. Comments must be received by November 7, 1994.

ADDRESSES: Comments on this rule should be mailed or delivered, in triplicate, to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC–200), Docket No. 27890, 800 Independence Avenue, SW., Washington, DC 20591. Comments mailed or delivered must be marked Docket No. 27890. Comments may be examined in room 915G weekdays, except on Federal holidays, between 8:30 a.m. and 5 pm.

FOR FURTHER INFORMATION CONTACT: Dennis P. McEachen, Manager, Aeromedical Standards and Substance Abuse Branch (AAM–210), Office of Aviation Medicine, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 493–4075; telefax (202) 267–5399.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to comment on this final rule by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, federalism, or economic impact that might result from adopting this amendment are also invited. Substantive comments should be accompanied by cost estimates. Comments must identify the regulatory docket number and should be submitted in triplicate to the Rules Docket address specified above. All comments received on or before the specified closing date for comments will be considered by the Administrator. This rule may be amended in consideration of comments received.

Background

Part 67 of Title 14 of the Code of Federal Regulations (14 CFR part 67) details the standards for the three classes of airman medical certificates. A first-class medical certificate is required to exercise the privileges of an airline transport pilot certificate, while second- and third-class medical certificates are required to exercise the privileges of commercial and private pilot certificates, respectively. An applicant who is found to meet the appropriate medical standards, based on medical examination and evaluation of the applicant's history and condition, is entitled to a medical certificate without restrictions other than the limit of its duration prescribed in the regulations.

Paragraph (f)(2) of §§ 67.13, 67.15, and 67.17 is the standard for determining an applicant's eligibility for first-, second-, and third-class medical certification based on general medical conditions. Specifically, under paragraph (f)(2), an applicant is ineligible for unrestricted medical certification if he or she has an organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon finds: (1) makes the applicant unable to safely perform the duties or exercise the privileges of the airman certificate the applicant holds or for which the applicant is applying or (2) may reasonably be expected within 2 years of the Federal Air Surgeon's finding to make the applicant unable to safely perform those duties or exercise those privileges. The Federal Air Surgeon's finding must be based on the applicant's case history and appropriate, qualified, medical judgment relating to the condition involved.

Paragraph (f)(2) long has been the basis for denying medical certification in cases where the Federal Air Surgeon has determined that an applicant's medication or other treatment (including prescription, over-the-counter, and nontraditional medication or other treatment remedies) interfere with the applicant's ability to safely perform the duties or exercise the privileges of the airman certificate for which the airman is applying or holds. The medication or other treatment may or may not be associated with an underlying medical condition that would be disqualifying for medical certification. For example, a hypnotic medication, such as a benzodiazepine, may be prescribed to treat a condition such as recurrent insomnia. Recurrent insomnia, depending on the circumstances, may not preclude eligibility for medical certification. The medication used to treat the condition, however, has potential adverse effects, such as dizziness, drowsiness, ataxia, and ''hangover.'' Exposure to such a medication could unpredictably interfere with the applicant's ability to safely perform the duties or exercise the privileges of the airman certificate held or applied for, posing a hazard to the applicant and to public safety.

Other medications have potential adverse effects that can occur with unpredictable frequency, duration, or severity. These adverse effects can be numerous and can include such conditions as cardiac arrhythmia, hypotension, over-sedation, and akathesia. Each of these effects may be inconsistent with aviation safety. In addition, some forms of treatment (e.g., surgery, radiation therapy, chemotherapy, and hemodialysis) have adverse effects that can interfere with an airman's ability to safely perform the duties or exercise the privileges of an airman certificate. The Federal Air Surgeon considers relevant factors on a case-

by-case basis, including potential adverse effects, to determine whether the medication or other treatment received by an airman is inconsistent with medical certification.

Notwithstanding the FAA's longstanding medical certification policy and practice under paragraph (f)(2) regarding medication and other treatment, the U.S. Court of Appeals for the Seventh Circuit recently determined that paragraph (f)(2) does not provide a basis for denial of medical certification based on medication alone. *Bullwinkel* v. *Fed. Aviation Admin.,* No. 93–1803 (7th Cir., Apr. 27, 1994), *reh'g. denied.* 1994 U.S. App. LEXIS 15779 (June 23, 1994). The *Bullwinkel* case involved the use of lithium. The focus of the Seventh Circuit's decision was not on the safety concerns that lithium use poses; instead, the court centered its attention on interpreting the specific language of the regulation. Although the court's decision concerned the airman's use of a medication, its rationale could apply to other forms of treatment as well.

The FAA disagrees with the Seventh Circuit's narrow reading of paragraph (f)(2) in the *Bullwinkel* case. However, regardless of the merits of the respective positions on how to interpret paragraph (f)(2), the Seventh Circuit's decision raises serious safety concerns that require the immediate adoption of an amendment that expressly states the FAA's authority to disqualify an individual who holds or is applying for an airman medical certificate in cases where medication or other treatment may interfere with that individual's ability to safely perform airman duties.

This final rule amends paragraph (f) of §§ 67.13, 67.15, and 67.17 by adding new paragraph (f)(3). New paragraph (f)(3) sets out the standard for certification where medication or other treatment is involved. Paragraph (f)(3) makes ineligible for unrestricted medical certification any applicant whose medication or other treatment the Federal Air Surgeon finds makes, or may reasonably be expected to make within 2 years after the finding, that applicant unable to safely perform the duties or exercise the privileges of an airman certificate. This final rule does not change the FAA's current and longstanding application of the certification standards. Rather its sole purpose is to expressly state the agency's practice in light of the *Bullwinkel* decision.

Also, for continuation of the current administration of medical certification procedures, reference to this emergency final rule is added by revising § 67.25, Delegation of authority, and § 67.27, Denial of medical certificate.

Good Cause Justification for Immediate Adoption

This amendment is being adopted without notice and a prior public comment period because delay in adoption could have a significant adverse effect on aviation safety, and because the amendment effects no change in well established agency application of the medical certification standards.

Therefore, the FAA finds that: (1) an emergency situation exists requiring the immediate adoption of this amendment; (2) the publication of a notice of proposed rulemaking with its opportunity for public comment is impracticable; and, (3) good cause exists for amendment in less than 30 days.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96–511), there are no requirements for information collection associated with this rule.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by Government regulations. The RFA requires a Regulatory Flexibility Analysis if a rule would have a significant economic impact, either detrimental or beneficial, on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, provides threshold cost and small entity size standards for complying with RFA review requirements in FAA rulemaking actions. After reviewing the projected effects of the rule in light of these standards, the FAA finds that the rule would not have significant economic impact on a substantial number of small entities.

International Trade Impact Statement

The rule would have little or no impact on trade for both U.S. firms doing business in foreign countries and foreign firms doing business in the United States.

Federalism Implications

The rule adopted herein will not have substantial direct effects on the states, on the relationship between the Federal government and the states, or on the distribution of power and responsibilities among

the various levels of government. Therefore, in accordance with Executive Order 12866, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

International Civil Aviation Organization (ICAO) and Joint Aviation Regulations

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with ICAO Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that this rule does not conflict with any international agreement of the United States.

Conclusion

The FAA has determined that this final rule is an emergency rule that must be issued immediately to correct an unsafe condition. Based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this final rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This final rule is not considered significant under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979).

The Amendment

In consideration of the foregoing, the FAA amends part 67 of Title 14 of the Code of Federal Regulations effective September 9, 1994.

The authority citation for part 67 continues to read as follows:

Authority: 49 U.S.C. app. 1354, 1355, 1421, 1422, and 1427; 49 U.S.C. 106(g).

Amendment 67–16

Revision of Authority Citations

Adopted: December 20, 1995 **Effective: December 28, 1995**

(Published in 60 FR 67254, December 28, 1995)

SUMMARY: This rule adopts new authority citations for Chapter I of Title 14 of the Code of Federal Regulations (CFR). In 1994, the Federal Aviation Act of 1958 and several other statutes conferring authority upon the Federal Aviation Administration were recodified into positive law. This document updates the authority citations listed in the Code of Federal Regulations to reference the current law.

DATES: This final rule is effective December 28, 1995. Comments on this final rule must be received by March 1, 1996.

FOR FURTHER INFORMATION CONTACT: Karen Petronis, Office of the Chief Counsel, Regulations Division (AGC–210), Federal Aviation Administration, 800 Independence Ave., SW., Washington, DC 20591; telephone (202) 267–3073.

SUPPLEMENTARY INFORMATION: In July 1994, the Federal Aviation Act of 1958 and numerous other pieces of legislation affecting transportation in general were recodified. The statutory material became ''positive law'' and was recodified at 49 U.S.C. 1101 *et seq.*

The Federal Aviation Administration is amending the authority citations for its regulations in Chapter I of 14 CFR to reflect the recodification of its statutory authority. No substantive change was intended to any statutory authority by the recodification, and no substantive change is introduced to any regulation by this change.

Although this action is in the form of a final rule and was not preceded by notice and an opportunity for public comment, comments are invited on this action. Interested persons are invited to comment by submitting such written data, views, or arguments as they may desire by March 1, 1996. Comments should identify the rules docket number (Docket No. 28417) and be submitted to the address specified under the caption ''FOR FURTHER INFORMATION CONTACT.''

Because of the editorial nature of this change, it has been determined that prior notice is unnecessary under the Administrative Procedure Act. It has also been determined that this final rule is not a ''significant regulatory action'' under Executive Order 12866, nor is it a significant action under DOT regulatory policies and procedures (44 FR 11034, February 26, 1979). Further, the editorial nature of this change has no known or anticipated economic impact; accordingly, no regulatory analysis has been prepared.

Adoption of the Amendment

In consideration of the forgoing, the Federal Aviation Administration amends 14 CFR Chapter I effective December 28, 1995.

The authority citation for part 67 is revised to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45303.

Amendment 67–17

Revision of Airman Medical Standards and Certification Procedures and Duration of Medical Certificates

Adopted: March 12, 1996 **Effective: September 16, 1996**

(Published in 61 FR 11238, March 19, 1996)

SUMMARY: This rule revises airman medical standards and medical certification procedures. The amendments implement a number of recommendations resulting from a comprehensive review of the medical standards announced in previous notices. This revision of the standards for airman medical certification and associated administrative procedures is necessary for aviation safety and reflects current medical knowledge, practice, and terminology. Also, this rule revises procedures for the special issuance of medical certificates (''waivers'') for those airmen who are otherwise not entitled to a medical certificate.

This rule also changes the duration of third-class airman medical certificates, based on the age of the airman, for operations requiring a private, recreational, or student pilot certificate.

Also, in this document, the FAA is announcing disposition of a number of petitions for rulemaking related to medical standards and duration of medical certificates.

FOR FURTHER INFORMATION CONTACT: Dennis McEachen, Manager, Aeromedical Standards and Substance Abuse Branch, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 493–4075.

SUPPLEMENTARY INFORMATION:

Background

Current Requirements—Airman Medical Certification

Section 61.3(c) of Title 14 of the Code of Federal Regulations (14 CFR part 61) provides, with some exceptions, that no person may serve as pilot in command or in any other capacity as a required pilot flight crewmember unless that person has in his or her personal possession an appropriate current airman medical certificate issued under 14 CFR part 67. Part 67 provides for the issuance of three classes of medical certificates. A first-class medical certificate is required to exercise the privileges of an airline transport pilot certificate. Second- and third-class medical certificates are needed to exercise the privileges of commercial and private pilot certificates, respectively.

A person who is found to meet the appropriate medical standards, based on a medical examination and an evaluation of the applicant's history and condition, is entitled to a medical certificate without restrictions or limitations other than the prescribed limitation as to its duration. These medical standards are currently set forth in §§ 67.13, 67.15, and 67.17.

Special Issuance of Airman Medical Certificates

An applicant for a medical certificate who is unable to meet the standards in §§ 67.13, 67.15, or 67.17, and be entitled to a medical certificate, may nevertheless, be issued a medical certificate on a discretionary basis. Procedures for granting special issuances or exemptions have always been available,

and, thus, failure to meet the standards has never been absolutely disqualifying. Historically, approximately 99 percent of all applicants ultimately receive a medical certificate.

Under § 67.19, Special issue of medical certificates, at the discretion of the Federal Air Surgeon, acting on behalf of the Administrator under § 67.25, a special flight test, practical test, or medical evaluation may be conducted to determine that, notwithstanding the person's inability to meet the applicable medical standard, airman duties can be performed, with appropriate limitations or conditions, without endangering public safety. If this determination can be made, a medical certificate may be issued with appropriate safety limitations.

Duration of Airman Medical Certificates

Section 61.23 identifies the duration of validity and privileges of each class of medical certificate. Currently, a first-class medical certificate is valid for 6 months for operations requiring an airline transport pilot certificate, 12 months for operations requiring a commercial pilot certificate or an air traffic control tower operator certificate (for non-FAA controllers), and 24 months for operations requiring only a private, recreational, or student pilot certificate. A second-class medical certificate is valid for 12 months for operations requiring a commercial pilot certificate or an air traffic control tower operator certificate (for non-FAA controllers) and for 24 months for operations requiring only a private, recreational, or student pilot certificate. A third-class medical certificate currently is valid for 24 months for operations requiring a private, recreational, or student pilot certificate.

History

On October 21, 1994, the FAA published a notice of proposed rulemaking (NPRM) (Notice No. 94–31, 59 FR 53226) proposing to amend parts 61 and 67. The proposed revisions to part 67 were based on an agency review of part 67 which was announced in the preamble to Amendment 67–11 (47 FR 16298; April 15, 1982) and on recommendations from a report prepared for the FAA by the American Medical Association (AMA). In the preamble to Amendment 67–11, the FAA announced that it intended to conduct an overall review of the medical standards in part 67. A complete review of the regulations was needed to bring the standards and procedures for airman medical certification up to date with advances in medical knowledge, practice, and terminology. Amendment 67–11 was considered interim clarification until a comprehensive review of the medical standards contained in part 67 could be concluded.

The FAA began the review of the medical standards for airmen and of its certification practices and procedures by requesting public comment (47 FR 30795; July 15, 1982). In addition, the FAA initiated a contract with the AMA to provide professional and technical information. The AMA presented its report, ''Review of Part 67 of the Federal Air Regulations and the Medical Certification of Civilian Airmen'' (AMA Report), on March 26, 1986. The public was again invited to comment on part 67 in ''Announcement of the Availability of a Report'' (51 FR 19040; May 23, 1986). The AMA Report detailed the results of a comprehensive review of the standards for airman medical certification and of their application. The AMA Report considered pertinent advances in the field of medicine since 1959, recommended changes in the FAA medical standards, and explained the rationale for such changes. The FAA considered public comments received on the AMA Report in developing Notice No. 94–31.

In a separate but related issue, on May 11, 1979, the Aircraft Owners and Pilots Association (AOPA) petitioned to amend § 61.23 to require medical examinations for private pilots at 36-month intervals rather than at 24-month intervals. In response to the 1979 AOPA petition to amend § 61.23, the FAA issued on October 29, 1982, NPRM No. 82–15 (47 FR 54414, December 2, 1982) proposing to amend part 61 to revise the duration of validity of third-class privileges of airman medical certificates for operations requiring a private or student pilot certificate. As proposed by Notice No. 82–15, the requirement for a third-class medical examination would have been changed to every 5 years for the youngest pilots then increasing in frequency to the existing 2-year interval for older pilots.

On September 27, 1985, prior to the issuance of the AMA Report on its review of the airman medical standards and certification procedures in part 67, the notice proposing to amend part 61 to revise the duration of third-class airman medical certificates was withdrawn (50 FR 39619). The proposal was withdrawn, in part, because of issues raised by the medical community. Given the then pending issuance of the AMA Report and the possibility that the report would provide better data on which to base an evaluation of the safety concerns raised by the medical community, the FAA decided that any future consideration of examination frequency would be within the context of the outcome of the comprehensive review of part 67.

Petitions for Rulemaking

The FAA has received a number of other petitions for rulemaking that relate to airman medical certification and duration. These petitions are disposed of in this rulemaking. For each of these petitions a public docket was established, a notice of the petition was published in the *Federal Register*, and comments, if any, received on the petition were placed in the docket for public inspection.

On July 30, 1981, the Civil Pilots for Regulatory Reform petitioned the FAA to revise the rules so that pilots who have incurred a myocardial infarction will not be automatically disqualified for life for airman medical certification. (Docket No. 22054) This petition was discussed in the preamble to the NPRM (59 FR 53243). Also, see the discussion in this preamble under ''Cardiovascular §§ 67.111, 67.211, and 67.311'' and the corresponding rule language. Comments received on the petition totaled 311; all of which generally supported the petition. After careful consideration of all the comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has determined that a diagnosis or medical history of myocardial infarction will continue to be disqualifying under part 67.

On February 26, 1986, AOPA again petitioned the FAA to revise the duration of a third-class airman medical certificate to 36 calendar months for noncommercial operations requiring a private, recreational, or student pilot certificate. (Docket No. 24932) See preamble discussion under ''Discussion of Comments and Amendments to Part 61'' (§ 61.23) and the corresponding rule language. Comments received on this petition totaled two; both supported the petition. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has decided to deny this AOPA petition and adopt the proposal (Docket No. 27940) with the modifications discussed under ''Discussion of Comments and Amendments to Part 61.''

On January 20, 1989, a petition was submitted to the FAA by Thomas J. Rush to provide a longer timeframe (60 or 90 days) for airmen to schedule medical examinations when they renew their special issuances of medical certificates. (Docket No. 25787) See the discussion in the preamble under ''Special Issuance § 67.401;'' ''Discussion of Comments and Amendments to Part 61;'' and the corresponding rule language. The *Federal Register* notice of this petition received no comment. After careful consideration of the issues of this petition and of comments to the current rulemaking action (Docket No. 27940), the FAA has determined that the rule as it relates to this issue should remain unchanged.

On February 12, 1990, AOPA petitioned the FAA to revise certain eye and cardiovascular standards to facilitate medical certificate issuance and better relate those standards to current medical knowledge and technology. Changes sought included the following: (1) Change the color vision standard for first-class medical certificates to the standard used for second-class medical certificates; and delete the color vision standard for third-class medical certificates; (2) Delete the uncorrected visual acuity standards; (3) Change the pathology of the eye standard for second-class medical certificates to the standard used for first-class medical certificates; and (4) For second- and third-class medical certificates, relate cardiovascular conditions to their impact on the applicant's ability to operate safely. (Docket No. 26156) See the discussion in the preamble under the major heading ''Vision §§ 67.103, 67.203, and 67.303'' (''Color Vision §§ 67.103(c), 67.203(c), and 67.303(c)''; ''Distant Visual Acuity''; ''Near Visual Acuity Standard''; and ''Intermediate Visual Acuity Standard''); and ''Cardiovascular §§ 67.111, 67.211, and 67.311''. Also see the corresponding rule language for these sections. Comments received on the petition totaled 80; 79 generally support the petition and 1 from the Air Line Pilots Association (now known as the Air Line Pilots Association International) (ALPA) opposed the petition. ALPA opposed the petition because they considered it premature in light of FAA's active rulemaking project to revise all of part 67. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has decided to adopt the vision and cardiovascular proposals of the current rulemaking action (Docket No. 27940) with the modifications discussed under ''Discussion of Comments and Final Rule for Part 67.''

On June 25, 1990, AOPA petitioned the FAA to amend frequently waived medical standards as follows: (1) Add a provision for continued limited pilot privileges pending FAA action on an application for renewal of a medical certificate; (2) Permit applicants for all classes of medical certificates to meet revised hearing standards in either or both ears with or without a corrective device; (3) Change the 2-year period of abstinence from alcohol to a period ''reasonable to ensure abstinence''; and (4) Permit issuance of second- and third-class medical certificates to diabetics using hypoglycemic drugs other than insulin (with Federal Air Surgeon concurrence). (Docket No. 26281) See the discussion in the preamble under ''Discussion of Comments and Amendments to Part 61'' (§ 61.23); ''Hearing §§ 67.105(a), 67.205(a), and 67.305(a)''; under the major heading ''Mental Standards §§ 67.107, 67.207, and 67.307'' (''Substance Dependence and Definitions'' and ''Substance Abuse''); and ''Diabetes §§ 67.113(a), 67.213(a), and 67.313(a)''. Also see the corresponding rule language for these sections. Comments received on the petition totaled 29; 28 generally supported the petition, and one from ALPA opposed the petition. ALPA opposed

the AOPA petition for the same reason it opposed the February 1990 AOPA petition; ALPA considered it premature in light of FAA's active rulemaking project to revise all of part 67. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has decided to adopt the duration, hearing, mental, and general medical proposals with the modifications discussed under ''Discussion of Comments and Amendments to Part 61'' and ''Discussion of Comments and Final Rule for Part 67.''

On August 27, 1990, a petition was submitted to the FAA by Frank Goeddeke, Jr., to allow individuals with alcoholism problems to obtain a medical certificate after abstaining from alcohol for 90 days, rather than the 2-year time period stipulated in the rules. (Docket No. 26330) See the discussion in the preamble under the major heading ''Mental Standards §§ 67.107, 67.207, and 67.307'' (''Substance Dependence and Definitions'' and ''Substance Abuse''). Also see the corresponding rule language for these sections. Comments received on the petition totaled three; all three supported the petition. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has decided to retain the 2-year abstinence requirement related to alcoholism.

In February 1991, the American Diabetes Association petitioned the FAA to amend the special issuance provisions of part 67 or, alternatively, amend the FAA special issuance policy to permit grants of special issuance of medical certificates to persons with insulin-treated diabetes mellitus (ITDM) and permit grants of special issuance of medical certificates on a case-by-case basis. The ADA also requested the creation of an FAA-appointed medical task force to develop a medical protocol to permit meaningful case-by-case review. (Docket No. 26493) The FAA referred to this petition in a request for comments on a proposed policy change concerning individuals with diabetes mellitus who require insulin that was published in the *Federal Register* on December 29, 1994. (See 59 FR 67246) See also the discussion in this preamble under ''Diabetes §§ 67.113(a), 67.213(a), and 67.313(a)'' and the corresponding rule language. Comments received on the petition totaled 160; there was general support for the rulemaking part of the petition. Most commenters, however, strongly support special issuance of medical certificates for persons with ITDM. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA is denying that part of the ADA petition that requested rulemaking; i.e., an amendment to § 67.19. The FAA will respond to the ADA request for a policy change and to the comments received to both dockets when it publishes in a separate notice its disposition of the December 29, 1994, notice on that subject (Docket No. 26493).

On September 24, 1993, AOPA once again petitioned the FAA to revise the duration of a third-class airman medical certificate to 48 calendar months for a specific trial period for noncommercial operations requiring a private or student pilot certificate. (Docket No. 27473) See the preamble discussion under ''Discussion of Comments and Amendments to Part 61'' (§ 61.23) and the corresponding rule language. Comments received on the petition totaled 140; 137 generally supported the petition and 3 opposed it. After careful consideration of all comments, both from this petition and the current rulemaking action (Docket No. 27940), the FAA has decided to deny this AOPA petition and adopt the current rulemaking action's duration proposal (Docket No. 27940) with the modifications discussed under ''Discussion of Comments and Amendments to Part 61.''

The FAA considered each of these petitions for rulemaking and the public comments on the petitions in preparing the NPRM and this final rule. The FAA believes that the actions requested in the petitions are addressed and resolved in this rulemaking action. Therefore, action in each of the referenced petitions is considered completed by publication of this final rule.

The FAA is also addressing two other petitions for rulemaking relating to part 67. On August 14, 1991, a petition was submitted to the FAA by Charles Webber and on June 20, 1992, a petition was submitted to the FAA by Robert H. Monson. Both of these petitioners request that the FAA eliminate § 67.3 in its entirety. The petitioners state that this rule allows the FAA to obtain a copy of an applicant's automobile driving record before an airman medical certificate can be issued and that this violates individual privacy rights (under the Privacy Act, 5 United States Code (U.S.C.) 552a). (Docket No. 26782 and Docket No. 26913) Section 67.3 was added to part 67 in 1990 after the National Driver Register (NDR) Act of 1982 was amended to specifically authorize the FAA to receive information from the NDR regarding motor vehicle actions that pertain to any individual who has applied for an airman medical certificate. In the NPRM and in this final rule § 67.3 has been recodified as § 67.7. The substance of this section was not discussed in the NPRM for this rulemaking because the background, issues, and public comments had been thoroughly covered in the final rule for § 67.3 (August 1, 1990; 55 FR 31300). Since § 67.3 went into effect, the FAA has found access to the NDR useful in making medical certification determinations. Comments received to the Webber petition totaled 24; all generally supported the petition. The Monson petition received no comment. After careful consideration of both petitions and all the comments, both from the petitions and the current rulemaking action (Docket No. 27940), the FAA has determined it will take no further action on the referenced petitions after publication of this final rule.

In accordance with the above discussion and after consideration of comments received on the NPRM, the FAA is revising part 67 and §§ 61.23 and 61.39 of part 61.

Summary of Amendments to Part 67

The following is a summary of the substantive revisions made by this rulemaking. Because this rulemaking completely recodifies part 67, this summary states both the current and new section/paragraph numbers.

1. Distant visual acuity requirements for first- and second-class medical certification are changed to delete the uncorrected acuity standards. However, each eye must be corrected to 20/20 or better, as in the current standard. [Current §§ 67.13(b) and 67.15(b); Final §§ 67.103(a) and 67.203(a)]

2. For third-class medical certification, the current 20/50, uncorrected, or 20/30, corrected, distant visual acuity standard is changed to 20/40 or better, in each eye, with or without correction. [Current § 67.17(b); Final § 67.303(a)]

3. For first- and second-class medical certification, minimum near visual acuity requirements are specified in terms of Snellen equivalent (20/40), corrected or uncorrected, each eye, at 16 inches. This replaces the current standard of v=1.00 at 18 inches for first-class only. An intermediate visual acuity standard (near vision at 32 inches) of 20/40 or better at 32 inches Snellen equivalent, corrected or uncorrected, is added to the first- and second-class visual requirements for persons over age 50. [Current §§ 67.13(b) and 67.15(b); Final §§ 67.103(b), 67.203(b), and 67.303(b)]

4. A near visual acuity standard of 20/40 or better, Snellen equivalent (20/40), corrected or uncorrected, each eye, at 16 inches is added to the third-class visual requirements. [Current (None); Final § 67.303(b)]

5. Color vision requirements are amended to read: ''ability to perceive those colors necessary for safe performance of airman duties,'' and are the same for all classes. Current standards require ''normal color vision'' for first-class and the ability to distinguish aviation signal colors for second- and third-class applicants. [Current §§ 67.13(b), 67.15(b), and 67.17(b); Final §§ 67.103(c), 67.203(c), and 67.303(c)]

6. The current first-class standard pertaining to pathological conditions of the eye or adnexa that interfere or that may reasonably be expected to interfere with proper function of an eye is substituted in both the second- and third-class standards for the current standards which specify, respectively, ''no pathology of the eye'' and ''no serious pathology of the eye.'' [Current §§ 67.15(b) and 67.17(b); Final §§ 67.203(e) and 67.303(d)]

7. The ''whispered voice test'' for hearing is replaced for all classes by a conversational voice test using both ears at 6 feet; an audiometric word (speech) discrimination test to a score of at least 70 percent obtained in one ear or in a sound field environment; or pure tone audiometry according to a table of acceptable thresholds (American National Standards Institute (ANSI), 1969). [Current §§ 67.13(c), 67.15(c), and 67.17(c); Final §§ 67.105(a), 67.205(a), and 67.305(a)]

8. The standards pertaining to the ear, nose, mouth, pharynx, and larynx are revised to more general terms and related to flying and speech communication. Specific references to the mastoid and eardrum are deleted. The current standard, ''No disturbance in equilibrium,'' is changed to, ''No ear disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.'' The amended standards are the same for all classes. [Current §§ 67.13(c), 67.15(c), and 67.17(c); Final §§ 67.105(b), 67.205(b), and 67.305(b)]

9. ''Psychosis,'' as used in the final rule, refers to a mental disorder in which the individual has delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition, or may reasonably be expected to manifest such symptoms. [Current §§ 67.13(d), 67.15(d), and 67.17(d); Final §§ 67.107(a), 67.207(a), and 67.307(a)]

10. Substance dependence and substance abuse are defined and specified as disqualifying medical conditions. Substance dependence is disqualifying unless there is clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance for not less than the preceding 2 years. Substance abuse is disqualifying if use of a substance was physically hazardous and if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous; or if a person has received a verified positive drug test result under an anti-drug program of the Department of Transportation or one of its administrations within the preceding 2 years. Alcohol dependence and alcohol abuse are included in the terms ''substance dependence'' and ''substance abuse'', respectively. [Current §§ 67.13(d), 67.15(d), and 67.17(d); Final §§ 67.107(a) and (b), 67.207(a) and (b), and 67.307(a) and (b)]

11. ''Bipolar disorder'' is added as a specifically disqualifying condition. This addresses an issue created by a change in nomenclature contained in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM III), and continued in the DSM IV. [Current (None); Final §§ 67.107(a), 67.207(a), and 67.307(a)]

12. The general mental standard is amended to add the word ''other'' before ''mental.'' The final revised standard reads, ''No other personality disorder, neurosis, or other mental condition . . . .'' [Current §§ 67.13(d), 67.15(d), and 67.17(d); Final §§ 67.107(c), 67.207(c), and 67.307(c)]

13. ''A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause,'' is added as a specifically disqualifying neurologic condition. [Current (None); Final §§ 67.109(a), 67.209(a), and 67.309(a)]

14. The word ''seizure,'' is substituted for ''convulsive.'' [Current §§ 67.13(d), 67.15(d), and 67.17(d); Final §§ 67.109(b), 67.209(b), and 67.309(b)]

15. ''Cardiac valve replacement,'' ''permanent cardiac pacemaker implantation,'' and ''heart replacement'' are added as specifically disqualifying cardiovascular conditions for all classes of certification. [Current §§ 67.13(e), 67.15(e), and 67.17(e); Final §§ 67.111(a); 67.211 (d), (e), and (f); and 67.311 (d), (e), and (f)]

16. The time period for which an electrocardiogram may be used to satisfy the requirements of the first-class medical certificate is revised to 60 days from the current 90 days. [Current § 67.13(e); Final §§ 67.111(c)]

17. The current table of age-related maximum blood pressure readings for applicants for first-class medical certificates and the reference to ''circulatory efficiency'' are deleted. Blood pressure will continue to be assessed for all three classes but will be evaluated under the appropriate general medical standards. [Current § 67.13(e); Final §§ 67.113(b), 67.213(b), and 67.313(b)]

18. Current § 67.19, Special issue of medical certificates, is rewritten [Final § 67.401(a)] to provide for, at the discretion of the Federal Air Surgeon, an ''Authorization for a Special Issuance of Medical Certificate'' (Authorization), valid for a specified period of time. An individual who does not meet the published standards of part 67 may be issued a medical certificate of the appropriate class if he or she possesses a valid Authorization. The duration of any medical certificate issued in accordance with proposed § 67.401 is for the period specified at the time of its issuance or until withdrawal of an Authorization upon which the certificate is based. A new Authorization is required after expiration, and the applicant must again apply for a special issuance of a medical certificate.

19. Final § 67.401(b) provides for a Statement of Demonstrated Ability (SODA) instead of an Authorization. A SODA will be issued with no expiration date to applicants whose disqualifying conditions are static or nonprogressive and who have been found capable of performing airman duties without endangering public safety. A SODA authorizes an aviation medical examiner to issue a medical certificate if the applicant is otherwise eligible.

20. Final § 67.401(e) retains the language of current § 67.19(c) regarding consideration of the freedom of a private pilot to accept reasonable risks to his or her own person or property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and consideration at the same time of the need to protect the safety of persons and property in other aircraft and on the ground.

21. Final § 67.401(f) adds language that explicitly provides that the Federal Air Surgeon may withdraw the Authorization or SODA. An Authorization or SODA may be withdrawn at any time for (1) adverse change in medical condition, (2) failure to comply with its provisions, (3) potential endangerment of public safety, (4) failure to provide medical information, or (5) the making or causing to be made of a statement that is covered by § 67.403.

22. Final § 67.401(i) permits a person to request that the Federal Air Surgeon review a decision to withdraw an Authorization or SODA. The request for a review must be made within 60 days of the service of the letter that withdrew the Authorization or SODA. The review procedures will be on an expedited basis and will provide the affected holder of an Authorization or SODA a full opportunity to respond to a withdrawal by submitting supporting appropriate evidence.

23. Final § 67.403 differs from current § 67.20 by providing for denial of an airman medical certificate if the application for an airman medical certificate is falsified. Though this consequence is implied, the current regulation specifically provides only for revocation or suspension of certificates. Additionally, § 67.403 provides for denial or withdrawal of any Authorization or SODA if the information provided to obtain it is false, whether the statement was knowingly false or unknowingly incorrect. Finally, § 67.403(c) makes an unknowingly incorrect statement that the FAA relied upon in making its decisions regarding

an application for an airman medical certificate or a request for an Authorization or SODA, a basis for denial, revocation, or suspension of an airman medical certificate and the denial or withdrawal of an Authorization or SODA.

24. A new § 67.415 provides that the holder of any medical certificate that is suspended or revoked shall, upon the Administrator's request, return it to the Administrator. The FAA practice always has been to request return of the certificate in such circumstances to avoid any misunderstanding as to the validity of the certificate.

25. Where appropriate, changes are made to eliminate gender-specific pronouns, to replace ''applicant'' with ''person,'' to use current position titles and addresses, to correct spelling and improve syntax, and to adjust section and paragraph references.

General Discussion of Public Comments

In response to the NPRM, the FAA received over 5,200 written comments from the public. In addition, in January of 1995, the FAA held three public meetings on the proposal, at which approximately 50 individuals and organizations participated. One was held in Washington, D.C., one in Orlando, Florida, and one in Seattle, Washington. Information from both the written comments to the docket and the presentations at these public meetings was considered in the final rule decisions along with the petitions for rulemaking and the comments received to those dockets discussed above.

Commenters include approximately 30 trade associations, over 20 FAA aviation medical examiners (AME's), and over 5,100 members of the general public. Air transport pilots and other commercial pilots, private and recreational pilots, flight schools, and flight instructors were among the public commenters.

A substantial number of commenters oppose the proposed changes on the basis that these changes would be a financial burden, that there is a lack of accident data to support stricter standards, and that the stricter standards would not produce discernible safety benefits. There was little or no opposition, however, to proposed changes that relaxed standards or reduced the regulatory burden.

The FAA carefully considered each comment and all presentations made at the public meetings in determining this final rule. Comments that address specific proposed requirements relevant to the proposed rule are summarized and responded to in the following sections of this preamble. To the extent possible, all comments relevant to the adopted standards and regulatory changes are addressed; issues not relevant to this rulemaking raised in the written comments or at the public meetings are not addressed in this document.

The FAA has determined that several of the proposed stricter standards are not required at this time. The withdrawal of these proposed stricter standards are fully discussed in the relevant sections of this document.

Overall Justification and Authority for This Rulemaking

AOPA, which represents the interests of 330,000 pilots and aircraft owners, states in its comment that there is not sufficient justification to warrant this rulemaking since more than 98 percent of all general aviation accidents do not involve medical factors. AOPA also asserts that the FAA's statutory authority for regulating medical standards does not justify the medical certification program currently in place, especially with respect to persons who exercise only private or recreational flying privileges. AOPA states that it is unable to identify a grant of authority to the Administrator to deny a medical certificate to a pilot based, not on the pilot's present physical ability but on the finding that a condition may reasonably be expected within 2 years after the finding to make the pilot unable to perform the required duties. AOPA believes that the FAA should reconsider whether the proposal goes beyond the intent of the Federal Aviation Act of 1958 and beyond what is necessary to safety in air commerce.

In a related comment, the Independent Pilots Association (IPA) states that ''nowhere is the FAA or the Federal Air Surgeon charged with the duty to practice preventive medicine.''

FAA Response: The FAA has not gone beyond the intent of its authority in this rulemaking action. As stated previously in this notice, the purpose of this rulemaking is to update the medical standards to reflect current medical knowledge, practice, and terminology. The FAA is authorized under 49 U.S.C. 44703 to find that an applicant for an airman certificate is physically able to perform duties pertaining to the position for which the certificate is sought. The FAA is to issue such a certificate ''containing such terms, conditions, and limitations as to duration thereof, periodic or special examinations, tests of physical fitness, and other matters'' necessary to assure aviation safety.

It is reasonable that airmen, sharing the same air space and flying over the same populated areas, whether engaged in air transportation or in private operations, must meet certain standards in skills and

medical fitness to assure aviation safety. That some distinction in the degree of standards is permissible is reflected in the distinction between types of pilot certificates and classes of medical certificates as required by law. While the FAA is not charged with the duty to practice preventive medicine, determining the medical fitness of airmen requires making an assessment of the risks involved in certain medical conditions and denying medical certification in instances in which the person is, or may be, unable to safely perform aviation activities.

On reconsideration of the proposal and after careful consideration of all the comments and presentations received, the FAA is withdrawing certain proposed requirements. Among the withdrawals are (1) the proposal to shorten the duration of third-class medical certificates for pilots 70 and older, (2) the requirement for a test to determine total blood cholesterol, and (3) electrocardiogram requirements for second-class medical certificates. A more complete discussion of the withdrawal of the requirements occurs in the following sections of the preamble.

One of the FAA's primary concerns is the need to ensure that its regulations maintain the proper balance between cost and benefits. The FAA will only issue a final rule when there is clear evidence that it will enhance safety, and that it will do so at a reasonable cost. This is a longstanding FAA commitment, and a requirement of DOT policies and procedures. In this context, after review of the comments, the FAA is not persuaded that there is yet adequate evidence to show that those costs of the proposals are justified by the safety benefits that can reasonably be expected.

However, the FAA will continue to monitor accident and health data as part of our responsibility to help ensure that adequate safety is maintained. Consistent with the principles of the Clinton administration's National Performance Review, the FAA will, in the coming months, explore alternative nonregulatory means to reduce medically-related accidents. These alternative administrative actions will not impose the same costs on airmen as the proposals contained in the NPRM, but will assist pilots and aviation medical examiners in identifying and reducing potential medical risks.

National Transportation Safety Board (NTSB) and Judicial Review

Several associations and individuals comment that this rulemaking appears to be an effort by the FAA to change decisions by the NTSB and the courts. Several individuals at the hearings held in conjunction with this rulemaking also expressed this opinion.

FAA Response: The FAA agrees that in some cases these comments are accurate. The FAA promulgates rules and policies when the FAA determines that a substantial public safety interest requires such action. In some circumstances, the NTSB or the courts have determined that the rule language adopted by the FAA does not achieve the FAA's intent. The FAA views the circumstances in which review authorities have disagreed with the FAA's interpretation of its rules as a reflection of regulatory defects and not a reflection of policy defects. This rule corrects the regulatory defects by clarifying or more accurately stating in the regulatory language those policies that the FAA believes are necessary to protect substantial public safety interests.

Discussion of Comments and Amendments to Part 61

Proposed § 61.23 lengthens the current 2-year third-class medical certification period to a 3-tier system: a 3-year period for pilots under age 40, a 2-year period for those age 40 to 69, and annual certification for pilots age 70 and over.

Comments: Most individual commenters expressed support for the increased duration (from 2 years to 3 years) for third-class medical certificates for pilots under age 40. Several AME's comment that it is appropriate to differentiate for age, although opinions of AME's and other commenters vary as to the age at which the frequency of examinations should change. Commenters suggest duration periods for third-class medical certificates ranging from 1 to 5 years.

Several associations, several AME's, and a majority of the individuals who commented on this issue strongly oppose the proposal to increase the frequency of medical examinations for pilots age 70 and over for reasons including the following: the proposal may be illegal under federal age discrimination laws; more frequent examinations will not predict sudden incapacitation; the benefits have not been demonstrated; accident rates are lower for older pilots; and the statistical analysis the FAA used to confirm that incidence of accidents increases with age is supported by an insufficient sample size. The Experimental Aircraft Association (EAA), AOPA, and the Colorado Pilots Association believe all airmen should have a 3-year standard regardless of age because, until medical technology reaches a point where the onset of a heart attack can be accurately predicted, there is no justification for more frequent or different examinations for pilots age 70 or over.

Some commenters say that the requirement will be particularly burdensome to older pilots, many of whom are on a fixed income. One commenter suggests that the FAA pay for annual examinations if they will be required. Several commenters note that such examinations are generally not covered by insurance.

FAA Response: The FAA has decided to lengthen the current 2-year third-class medical certification period to a 2-tier system. For airmen under age 40, medical certificates must be renewed every 3 years. For airmen age 40 and over, the current 2-year duration will remain.

As stated in the NPRM, extending the length of time between examinations for third-class medical certificates of persons under age 40 should result in no significant increase in undetected pathology between required examinations. The FAA, after careful consideration of all comments and testimony received as well as the petitions and comments received to Docket Nos. 24932, 26281, and 27473, has determined that extending the duration between medical examinations can be done with no detriment to safety in the case of younger airmen who are much less likely to suffer medical incapacitation. As with all age groups, those individuals under age 40 manifesting conditions that represent a risk to safety will be denied certification or, if they apply for and receive a special issuance of a medical certificate, will be restricted in their flying activities or examined more thoroughly and frequently, or both.

The final rule will provide for maximum regulatory relief without a decrement to public safety.

The proposal to shorten the duration of third-class medical certificates of airmen over the age of 70 is being withdrawn because on reexamination insufficient data exist to support the revision at this time. Several aviation associations, AME's, and individuals commented that the data used in the proposal did not support the conclusion that decreased accidents would result if the duration of third-class medical certificates for airmen over the age of 70 was shortened. The FAA has determined that the possible reduction of a very few known general aviation accidents that are medically-related cannot be justified when compared with the cost of the proposal. This is in contrast to accidents of airline transport and commercial carriers where a single accident may have significant loss of life and property.

All third-class medical certificates or third-class privileges of a first- or second-class medical certificate issued prior to the effective date of this final rule will remain valid for 2 years from the date of issuance of the certificate unless the validity period has been otherwise limited by the FAA. The period of validity for all third-class airman medical certificates or third-class privileges of a first- or second-class medical certificate issued on or after the effective date of this final rule will be calculated according to the provisions of the final rule unless the validity period is otherwise limited by the FAA.

Section 61.53 provides that: ''No person may act as pilot in command, or in any other capacity as a required pilot flight crewmember while he [or she] has a known medical deficiency, or increase of a known medical deficiency, that would make him [or her] unable to meet the requirements for his [or her] current medical certificate.'' This amendment does not change § 61.53, and the FAA continues to require airmen to comply with that rule. In reducing the frequency of required periodic contacts with knowledgeable health professionals, self-monitoring and personal attention to health become a more important part of the individual airman's responsibility for flight safety.

Consistent with the changes above, the final rule amends § 61.39 to coincide with the duration change in § 61.23. Section 61.39 requires that applicants must possess at least a third-class medical certificate or the third-class privileges of a first- or second-class medical certificate valid under § 61.23 in order to be eligible for a flight test for a certificate, or an aircraft or instrument rating.

Discussion of Comments and Final Rule for Part 67

The following discussion generally addresses comments received and the FAA's response to those comments on the specific standards or requirements in the rule. As noted above, over 5,200 comments were received concerning this rulemaking. The comments addressed by the FAA are broadly representative of these many thousands of comments. Other matters and issues raised by the commenters, such as additional tests and examinations that are performed under the special issuance procedures, are not addressed in this document. The FAA is responding only to comments that are within the scope of this rulemaking.

Lists of Medical Standards

General

''Include, but are not limited to.'' The proposal uses the word ''includes'' rather than the word ''are'' in each section of the medical standards because the proposed medical standards are not, and never have been, meant to be exhaustive in naming all medical conditions that are disqualifying.

Comments: AOPA, EAA, National Air Transportation Association (NATA), and most individual commenters say this provision gives FAA absolute discretion without proper promulgation of regulations; the language is too open-ended and provides no standard at all. AOPA states that because the disqualifying conditions are not enumerated, applicants cannot know if they have a deficiency for which the FAA would disqualify them. One AME says that the proposal gives the FAA too much leeway, and should read ''are limited to.'' A majority of the individual commenters strongly oppose use of the term ''include, but are not limited to,'' saying that it would allow FAA too much unchecked authority over an applicant.

FAA Response: The final rule will not contain the proposed language ''include, but are not limited to.'' Medical conditions identified during an evaluation that are not specifically listed as disqualifying but do not meet the general medical standard regarding safe performance of duties and exercise of privileges, would continue to be disqualifying under general medical standards. The intent of the proposal was to alert individuals of this long-standing FAA practice and not to expand the scope of the regulations.

Vision (§§ 67.103, 67.203, 67.303)

Distant Visual Acuity. The proposal deletes the uncorrected vision standard for first- and second-class medical certificates and requires a distant visual acuity of 20/20 or better, in each eye, with or without correction. For third-class medical certificates, a distant visual acuity of 20/40 or better with or without correction, is required for each eye.

Comments: Comments on the proposal for distant visual acuity were in favor of the changes; one AME notes that the proposal is less stringent than the present standards.

FAA Response: The final rule is the same as proposed in the NPRM. As stated in the NPRM, the FAA practice for many years has been to grant any class medical certificate requested, regardless of uncorrected distant acuity, if the required minimum vision is present or achieved through conventional corrective lenses, there is no evidence of significant eye pathology, and the person is otherwise eligible. Thousands of airmen have demonstrated their ability to safely perform their jobs while using corrective lenses for distant visual acuity that is poorer than 20/100 in each eye. The FAA, after careful consideration of the comments and presentations received as well as the petition and comments received to Docket No. 26156, has determined that the requirements for distant visual acuity may be relaxed. The revision will streamline the process of medical certification by not requiring special issuance for persons who cannot meet an uncorrected distant acuity standard.

Near visual acuity standard. The proposed rule replaces the outdated standards for near visual acuity by requiring for all three classes a near visual acuity of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.

Comments: United States Pilots Association (USPA) states that the FAA presented no evidence to justify the addition of a near-vision standard. Joint Aviation Authorities (JAA) also notes the lack of accident-supported data, but states that the European opinion is that the pilot should have enough visual capacity to read the aircraft instruments if his or her glasses or lenses are lost in flight. The EAA suggests changing 16 inches to ''ability to read an instrument panel,'' which would preserve the intent of the rule, but would not require any additional equipment or training of AME's.

Three AME's approve and one disapproves of the proposed near visual acuity standards. One AME doubts that a pilot with 20/40 vision can read small print (such as on instrument approach plates) in dim light, but notes that a nearsighted person can compensate by looking around one's spectacle lenses. Farsighted persons with 20/40 vision, however, may not be able to read small print at 16 inches. This commenter suggests (1) supplying AME's with specimen aeronautical charts and plates and requiring that the items be read in normal room light with or without correcting lenses, or (2) raising the near vision standard to at least 20/25.

FAA Response: The FAA agrees with the AMA Report recommendation that all three classes of medical certificates should have the same near visual acuity standards. The final rule is the same as proposed. It eliminates the antiquated terminology in the current standards for first-class medical certification, corrects the inconsistency between standards and practice for second-class medical certification, and establishes a standard for third-class medical certificates. After careful consideration of all comments and presentations received as well as the petition and comments received to Docket No. 26156, the FAA has determined that the near visual acuity standard proposed in the NPRM establishes an objective requirement that is necessary for safety and can be best accomplished by the final rule.

Intermediate visual acuity standard. The NPRM proposed to add a new intermediate visual acuity standard (near vision at 32 inches) for first- and second-class medical certificates for pilots age 50 or older of 20/40, Snellen equivalent, at 32 inches in each eye separately, with or without corrective lenses.

Comments: The AMA states that all pilot applicants older than 50 should have 20/40 visual acuity at 32 inches because they need this degree for proper sight and use of instruments, switches, and other controls.

Regarding intermediate visual acuity, AOPA says that 20/40 at 32 inches over age 50 is unjustified, and that the age criteria is arbitrary. One AME says there are no data or operational experience to suggest that an additional middle vision standard for older pilots is needed. According to one AME, the 32-inch intermediate vision standard is too strict for pilots over 50 and will add to the cost without adding any discernible benefit. According to this commenter, those who need trifocals already have them.

FAA Response: The final rule includes a requirement for intermediate visual acuity for first- and second-class medical certificates for pilots age 50 or older. This standard is consistent with the International Civil Aviation Organization (ICAO) standards. The AMA Report recommended this intermediate vision standard in light of the eye's diminished ability with age to accommodate intermediate viewing distances. Also, the NTSB has recommended that an intermediate vision standard be established. The FAA, after careful consideration of the comments received as well as the petition and comments received to Docket No. 26156, has determined to adopt the rule proposed in the NPRM; airline transport and commercial pilots need adequate intermediate vision to monitor aircraft instruments and other cockpit equipment. This standard is also necessary to safeguard the public safety.

Color Vision (§§ 67.103(c), 67.203(c), 67.303(c))

The proposed color vision standard for all classes is the ''ability to perceive those colors necessary for safe performance of airman duties.'' Current standards require ''normal color vision'' for first-class applicants and the ability to distinguish aviation signal colors for second- and third-class applicants.

Comments: The USPA, NATA, and National Agricultural Aviation Association (NAAA) support the proposed simplification of the color vision standard.

One AME states that the current system is adequate to identify the individual with a color vision problem and should be left intact. This commenter states that the proposed NPRM advances no new or improved method of determining color vision abilities.

AOPA and the AMA say that the regulations as proposed leave too much room for inconsistent interpretation; the rule should precisely state what colors are ''necessary for the safe performance of airman duties'' and what tests should be done. An individual suggests using visual flight rule (VFR) charts and runway and taxi light colors as discriminants for realistic and practical color vision tests. EAA says that the FAA should change the wording ''safe performance of airman duties'' to ''read and understand a sectional aeronautical chart.'' EAA believes this would ensure the intent of the rule, give the AME a simple inexpensive test, and better define what is necessary for safe performance of duties.

Aerospace Medical Association (ASMA) and Air Transport Association (ATA) oppose the proposed changes. ASMA suggests that the FAA discontinue the color blindness test; the standard should be based on an individual's ability to perform safely.

FAA Response: The final rule for color vision is the same as proposed. As stated in the NPRM, in current practice applicants for certification are tested by use of standard pseudoisochromatic plates or by other approved devices. A passing score defines the applicant as not color deficient. Failure indicates a color deficiency and requires that any medical certificate issued be limited, prohibiting flight at night or by color signal control. The limitation can be removed by successful completion of a practical signal light test or of a medical flight test, as appropriate for the class medical certificate sought and the level of aviation experience of the applicant. This final rule would allow, for all three classes of medical certificates, an individual who fails the test using pseudoisochromatic plates or other approved devices to still obtain a medical certificate without obtaining a waiver as long as the individual can demonstrate an ability to perceive those colors necessary for the safe performance of airman duties. The FAA will provide guidance to AME's to assist in these tests.

The FAA, after careful consideration of the comments and presentations received as well as the petition and comments received to Docket No. 26156, has determined that the color vision standard in the final rule should remain as proposed.

Hearing (§§ 67.105(a), 67.205(a), 67.305(a))

In the proposed rule, the ''whispered voice test'' for hearing is deleted for all classes and replaced with three alternatives: (1) A conversational voice test using both ears at 6 feet; (2) an audiometric word (speech) discrimination test to a score of at least 70 percent obtained in one ear or in a sound

field environment; or (3) pure tone audiometry according to a table of acceptable thresholds (ANSI, 1969).

Comments: Some AME's generally support the proposed hearing standards. ASMA states, however, that the rule language could be interpreted to require audiograms and that the FAA should state in the preamble that it intends for the basic screening test to be the spoken-voice test. ASMA also says that the rule should state that audiometric tests are only used as alternatives for further evaluation of individuals who show reduced hearing acuity.

Many commenters support the ''conversational voice'' recognition standard as operationally relevant. AOPA and USPA support the proposed standard that allows both ears to be used simultaneously to hear conversational voice spoken at 6 feet.

ATA says a pure tone audiogram followed by a speech discrimination test based upon an audiometric standard guideline would be a far more accurate and objective measurement of hearing than the highly subjective conversational and whispered voice tests.

ATA says that a 70 percent score on an audiometric word discrimination test is too low to support speech comprehension during critical phases of flight; the standard should be 95 percent. Another individual suggests that 85 percent would allow for accurate communication in more cockpit environments. ATA and one AME also believe that the rule is vague, should be more descriptive, and should cite a decibel reading for administering the test.

One AME says that possibly a screening cut-off level for pure-tone audiometry would be appropriate.

AOPA says that the same screening test should apply for those without ''normal hearing'' and users of hearing aids. According to AOPA, there appears to be no clinical reason for excluding the use of hearing aids within the medical standards.

Several commenters question whether an ''and'' or an ''or'' is appropriate between subparagraphs (a)(1) and (a)(2) of §§ 67.105, 67.205, and 67.305. Most think the rule should say ''or.''

A commenter notes that the standard for 2000 Hz in the chart in § 67.205(c) is 30 for the poorer ear, which is more stringent than the standard of 50 for first-class medical certificate. The commenter believes that this must be a typographical error.

FAA Response: The final rule is the same as proposed, except that the typographical error in the chart in § 67.205(c) is corrected to 50 and the lead-in for paragraph (a) in all three sections reads: ''The person shall demonstrate acceptable hearing by at least one of the following tests:'' and a period is placed at the end of each subparagraph. These editorial corrections to paragraph (a) are intended to eliminate any confusion or ambiguity. Passing any one of the tests, as required, is acceptable for certification. The FAA anticipates that the conversational voice test will be the most commonly used; however, passing any one of the tests will suffice even if the applicant has failed the other two. While there is some subjectivity to a conversational voice test, it is the simplest and least expensive form of testing. The FAA, after careful consideration of the comments and presentations received as well as the petition and comments received to Docket No. 26281, has determined that the hearing standards in the final rule should remain as proposed.

The FAA is following the AMA Report recommendations in requiring a 70 percent score in an audiometric word discrimination test. The FAA considers a 95 percent score too restrictive.

As with current policy, if a hearing aid is necessary to meet the standard, an Authorization or SODA is required. In most cases, however, a person using a hearing aid can be issued a medical certificate.

Equilibrium (§§ 67.105(c), 67.205(c), 67.305(c))

The proposal revises the current standard, ''No disturbance in equilibrium,'' to, ''No ear disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.'' The proposed standards are the same for all classes.

Comments: One commenter states that the ear, nose, throat, and equilibrium revisions are appropriate and realistic for addressing safety.

AOPA and other commenters say that the language relating to vertigo or disturbance of equilibrium is too broad; instead the rule should qualify that an applicant shall have ''no disturbance of equilibrium that is severe enough to make piloting an aircraft unsafe.'' AOPA asserts that vertigo is a common and normal occurrence and disqualification should not be based on a symptom. According to AOPA an episode of in-flight vertigo is not necessarily attributable to an underlying medical condition that

is disqualifying. AOPA notes that the FAA intentionally induces vertigo at safety seminars using a ''vertigon'' chair.

FAA Response: The final rule is the same as proposed. The final rule is more precise than the current rule since it specifies that the vertigo or disturbance of equilibrium be a manifestation of a condition or disease of the ear. It appears commenters are confusing pilot vertigo or spatial disorientation that can occur in flight with vertigo that is a manifestation of a medical condition or disease. In-flight pilot vertigo or spatial disorientation is not related to this medical standard. The FAA has determined, after careful consideration of the comments and presentations received, that the equilibrium standards in the final rule should remain as proposed.

Mental Standards (§§ 67.107, 67.207, 67.307)

Definition of Psychosis. The proposed rule states that ''psychosis'' refers to ''a mental disorder in which the individual has manifested psychotic symptoms or to a mental disorder in which the individual may reasonably be expected to manifest psychotic symptoms.'' This language change was proposed to be consistent with the diagnostic terminology and classification of mental disorders, published in the DSM III and its successor DSM IV.

Comments: ATA suggests identifying the underlying disorders that FAA considers psychoses, e.g., schizophrenia, paranoid states, or depression. ATA suggests defining psychosis as ''an alteration in either thought content or process, or both, to such an extent that the individual suffers from hallucinations, delusions, or other manifestations.'' One AME states that ''psychotic reaction'' needs further definition in the rule. IPA suggests that the FAA refrain from referring to a specific edition of the DSM since DSM-IV is the current psychiatric diagnostic standard, not the 15-year old DSM-III referenced in the NPRM. JAA says its Manual of Civil Aviation Medicine gives much more detailed interpretation of its psychiatric and psychological requirements.

FAA Response: On reconsideration and after careful consideration of the comments received, the FAA has changed the final rule language regarding psychosis to be more specific. Paragraph (a)(2) of §§ 67.107, 67.207, and 67.307 reads as follows:

> ''(2) A psychosis. As used in this section, 'psychosis' refers to a mental disorder in which:
>
> ''(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior or other commonly accepted symptoms of this condition; or
>
> ''(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.''

At the time of the AMA Report and the FAA review of part 67, the most current DSM was DSM III. Since then, the DSM has been revised and the most current version is DSM IV. The FAA has determined that the revisions between DSM III and DSM IV do not necessitate any substantive changes between the proposed rule and the final rule.

Bipolar disorder. The proposed rule adds bipolar disorder (formerly ''manic depressive psychosis'') as a specifically disqualifying mental condition because the American Psychiatric Association's nomenclature in DSM III and DSM IV no longer includes bipolar disorder within the category of psychoses.

Comments: One AME and a few individuals support the proposal to make bipolar disorders disqualifying.

AOPA believes bipolar disorder should not be singled out as a disqualifying mental condition, and that applicants should be evaluated on a case-by-case basis. AOPA asserts that bipolar disorders vary in severity and symptoms from one individual to another; some never exhibit the manic symptoms which appear to be the primary concern of the FAA.

FAA Response: The FAA, after careful consideration of the comments and presentations received, has determined that the final rule be the same as proposed. However, since the proposed rule was issued, DSM IV was developed which refers to more than one bipolar disorder and to separate criteria that apply to the different types of bipolar disorders. Although the DSM IV contains a change in classification of this disorder, there is no change in the rule language from the proposed rule language because the disorder, whatever its classification, is considered disqualifying.

The FAA believes these conditions are of concern in the context of airman medical certification and flight safety, and that the agency must amend the mental standards since in accordance with the DSM III and its successor DSM IV, psychoses no longer include bipolar disorders. In consideration of potential risk to flight safety, individuals with this diagnosis are rarely granted certification. Those

few individuals who are determined to be eligible for certification through the special issuance provisions must be followed closely for relapse and recurrence of symptoms. By including the new terminology, the standards will clearly reflect the agency's concern about this disorder. Specifically listing bipolar disorders as disqualifying is not a substantive change in FAA policy or practice.

Substance Dependence and Definitions. The proposal updates the standards for alcoholism and drug dependence to make them consistent with DSM III (and subsequently DSM IV) nomenclature which eliminates the term ''alcoholism'' and substitutes the diagnoses of ''substance dependence'' and ''substance abuse.'' The proposed revision defines ''substance dependence,'' ''substance abuse,'' and ''substance.'' The proposed revision identifies disqualifying substances or groups of substances (e.g., alcohol, cocaine, opioids, hallucinogens, cannabis, etc.) and would make dependence on or abuse of them disqualifying. The proposal also makes substance dependence disqualifying unless there is clinical evidence of recovery, including sustained total abstinence for not less than the preceding 2 years in the case of alcohol dependence, and the preceding 5 years in the case of other substance dependence.

Comments: Two AME's generally support the proposed changes regarding substance dependence. AOPA, National Air Traffic Controllers Association (NATCA), EAA, and two other AME's suggest a minimum 2-year abstinence for all substances because they believe the extended period of decertification for substance dependency is without statistical justification. According to these commenters, the AMA data on which the 5-year restriction is based are dated; there are many new treatments and research that indicate a required 5-year abstinence is too strict; and the 5-year rule may reflect some public hysteria concerning drug use. In addition, according to these commenters, there are six times as many alcohol-related accidents as drug-related accidents, bringing into question why the FAA is proposing stricter standards on other substances when alcohol is a greater problem.

Two AME's say the FAA should not broaden the substances and should leave the regulation as is. Another AME says FAA needs to further define ''substance'' by identifying particular drugs.

EAA says that the FAA should limit the disqualification for muscle relaxants to users of ''muscle relaxants with habit-forming potential'' because many muscle relaxants have no habit-forming potential.

FAA Response: The FAA, after careful consideration of the comments and presentations received as well as the petitions and comments received to Docket Nos. 26281 and 26330, has decided to make the minimum period of abstinence from alcohol and other substances 2 years because longer term experience with recovery from dependence on drugs or alcohol now suggest that 2 years is adequate for both alcohol and drugs. In many cases, the FAA has granted special issuance to air transport and commercial pilots and has waived the 2-year abstinence period when it was satisfied that certain stringent criteria are met. The criteria can be summarized as follows: (1) A full commitment and partnership of the aviation employer and employee to ensure the employee's continued sobriety through monitoring; (2) full commitment and partnership of the recovering employee with a fellow employee to ensure continued sobriety through monitoring; and (3) frequent evaluations, testing, and attendance at professional aftercare treatment.

Also, the FAA has decided to delete ''muscle relaxants'' from the list of substances in §§ 67.107(a)(4)(i), 67.207(a)(4)(i), and 67.307(a)(4)(i) in part because the FAA agrees with the EAA comment, but also because muscle relaxants are not included as a substance in DSM III and its successor DSM IV.

To conform with DSM IV terminology, the FAA has changed the reference to ''volatile solvents and gases'' to ''inhalants,'' a term the FAA considers to be equivalent.

Otherwise the final rule is the same as proposed. The standards are consistent with the AMA Report and address the national concerns about substance dependence.

Substance abuse. As proposed, substance abuse is one of the following:

(1) Use of alcohol within the preceding 2 years in a situation in which that use is physically hazardous, if there has been at any other time an instance of the use of alcohol or another substance also in a situation in which that use was physically hazardous; or

(2) Use of a substance other than alcohol within the preceding 5 years in a situation in which that use is physically hazardous, if there has been at any other time an instance of the use of that substance, alcohol, or another substance also in a situation in which that use was physically hazardous;

(3) Use of a prohibited drug defined in appendix I of part 121 of this chapter within the preceding 5 years; or

(4) Misuse of a substance within the preceding 2 years if alcohol or within the preceding 5 years if another substance, that the Federal Air Surgeon based on case history and appropriate qualified medical judgment, finds—

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Comments: Two AME's and other commenters generally support the proposed changes to the substance abuse standard.

The JAA states that the proposed recommendations are similar to those in the JAA proposals except that a shorter recertification period following alcohol abuse is allowed and the JAA Manual of Civil Aviation Medicine gives much more detailed interpretation of the psychiatric and psychological requirements.

EAA says the broad FAA list of ''substances,'' combined with the definition of ''abuse'' and the extremely vague issue of ''physical hazard'' makes it conceivable that abuse could be held as a single misapplication of prescription medication (e.g., amphetamines, tranquilizers, sedatives, and muscle relaxants).

FAA Response: The FAA has decided to make the time periods related to substance abuse of alcohol or other substances 2 years to be consistent with substance dependence abstinence time requirements of this section and for the reasons already given. Otherwise the final rule is the same as proposed, except that §§ 67.107(b)(2), 67.207(b)(2), and 67.307(b)(2) are modified. Instead of prohibiting the ''use of a prohibited drug defined in Appendix I of part 121,'' the final rule language reads ''A verified positive drug test result acquired under any anti-drug program or internal program of the U.S. Department of Transportation or any other Administration of the U.S. Department of Transportation.'' The modified language clarifies the FAA's intention in referencing Appendix I in the proposed rule. The FAA stated in the NPRM preamble that it considers a positive drug test conducted under any rule or internal program of the Department of Transportation to be compelling proof of the use of a prohibited drug for which the drug test was positive.

The changes are intended to provide specific regulatory medical standards and enhance the agency's ability to examine and exclude from aviation a person who, though not substance dependent, manifests recurrent abuse of alcohol or other legal or illegal substances, or has a single violation of DOT drug testing programs within the preceding 2 years. These standards are consistent with the AMA Report and address national concerns about substance abuse.

In referring to use of a substance when ''physically hazardous,'' the standard generally refers to instances such as driving or flying while intoxicated or under the influence of alcohol or drugs, but could also refer to other physically hazardous situations that occurred while a person was under the influence of alcohol or legal or illegal drugs. This term is also used in DSM III and its successor DSM IV. The FAA, after careful consideration of the comments and presentations concerning substance abuse as well as the petitions and comments received to Docket Nos. 26281 and 26330, has determined that the rule as modified provides adequate notice to airmen of the required medical standards and is necessary to protect the public safety.

Neurological (§§ 67.109, 67.209, and 67.309)

The FAA proposed three changes to the neurological standards, adding ''a single seizure'' to the list of disqualifying conditions; using ''seizure'' rather than ''convulsive'' to describe potentially disqualifying conditions; and adding a ''transient loss of control of nervous system functions'' standard.

Comments: ATA, AOPA, and three AME's assert that the proposed requirement that focuses on a single seizure is burdensome and not necessary; a single mild seizure should not be the sole cause for disqualification. ATA notes that a single febrile seizure during childhood, associated with a normal electroencephalogram (EEG), neurological examination, and imaging study, does not increase the risk for further seizure activity over time. EAA suggests rather than disqualifying applicants who have had seizures, AME's be given a checklist and evaluation guide for pilots with a history of a disturbance of consciousness or neurologic function. AOPA cites common causes of single seizure events including low sodium in the blood, heat exhaustion, head injury from which the applicant entirely recovers, and eclampsia during pregnancy.

One AME asserts that the frequency of in-flight incapacitation following seizure episodes is so low as to render this change unnecessary. According to the AME, febrile seizures are common, and the

amount of increased paperwork to request special issuance of a medical certificate for individuals who have had these is simply not worth it.

USPA and AOPA say the neurological loss of control definition is too broad and is open to abuse and misinterpretation.

In response to the FAA's statement in the NPRM preamble that neither the AMA-recommended test nor the test by Folstein provides a ''useful screening device, alone or in combination, for airman neurological status,'' the AMA emphasizes the extreme importance of a test of mental fitness in attempting to ensure aviation safety and strongly recommends that the FAA designate or develop a sensitive and more specific test of mental capacity if those proposed by the AMA Report are unsatisfactory.

FAA Response: The FAA, after careful consideration of all the comments and presentations received, has decided to withdraw the proposal that specifies that a single seizure is disqualifying. The proposed standard at paragraph (a)(2) will not be added to the first-, second-, or third-class medical certificate requirements. This part of the proposal is being withdrawn because the FAA agrees with commenters that a single febrile seizure in childhood should not in most instances be disqualifying. However, any seizure that has occurred must be reported by the applicant as part of the medical history and could be found to be disqualifying under the general neurological standards of §§ 67.109(b), 67.209(b), and 67.309(b). Also, a single seizure that constitutes a disturbance of consciousness or a transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause would be disqualifying under §§ 67.109(a)(2) or (3), 67.209(a)(2) or (3), and 67.309(a)(2) or (3). Under § 61.53, Operations during medical deficiency, such an occurrence would require an airman to cease exercising the privileges of any airman certificate held until medically evaluated and cleared for airman duties by the FAA.

The proposed change from ''convulsive disorder'' to ''seizure disorder'' at paragraph (b) remains in the final rule.

The FAA has determined that the addition of ''transient loss of control of nervous system functions'' should remain in the final rule. It clarifies the agency's aeromedical concern about such events whether or not they are characterized as disturbances of consciousness and allows for the identification and individual evaluation of persons with this history.

As to mental screening tests, neither the AMA Report nor the American Academy of Neurology/ American Association of Neurological Surgeons Report proposes detailed, objective criteria and tests that could be included in the standards and by which medical certification could be determined. Neither the AMA-recommended test nor the Folstein test provides a useful screening device, alone or in combination, for airman neurological status. Also, neither screening test, alone or in combination, provides predictors of skills relevant to piloting.

Cardiovascular (§§ 67.111, 67.211, and 67.311)

List of Disqualifying Conditions. The proposed rule adds to the list of disqualifying cardiovascular conditions for first-, second-, and third-class airman medical certificates an established medical history of cardiac valve replacement, permanent cardiac pacemaker implantation, and heart replacement.

Comments: None of the commenters specifically object to the disqualification for heart replacement.

Two associations, one AME, and several individuals do not support the proposal to specifically disqualify applicants with cardiac valve replacements or permanent cardiac pacemakers. One association states that the current list of disqualifying conditions is adequate. Many of these commenters say medical technology for valve replacements and pacemakers is excellent and improving, so it would be premature for the FAA to disqualify these heart conditions.

EAA says that for bioprosthetic cardiac valve patients with no signs of heart failure, arrhythmia, or atrial fibrillation, and with a normal functional capacity on stress testing, the FAA should not require the applicant to go through the special issuance process to obtain a medical certificate. According to the commenter, these individuals are at very low risk for sudden incapacitation and can perform normal activities including piloting an aircraft without undue risk. One AME believes that disqualifications for heart valve replacements should be evaluated on an individual basis.

EAA maintains that standby pacemakers or well-functioning permanent pacemakers should be allowed with a satisfactory cardiovascular evaluation and monitoring. Another commenter believes it is appropriate to deny pacemaker users first- and second-class medical certificates, but a pacemaker should not disqualify a person from a third-class medical certificate.

FAA Response: The FAA, after careful consideration of the comments and presentations received as well as the petitions and comments received to Docket Nos. 22054 and 26156, has determined that disqualifying cardiovascular conditions remain in the final rule as proposed. Further, the FAA has determined that these are serious conditions that give rise to safety concerns in the aviation environment specifically with regard to valve failure, pacemaker malfunction, progression of the underlying disease that required artificial cardiac pacing, organ rejection, or the complications of immunosuppression. As stated in the NPRM preamble, the FAA will continue to consider special issuance of medical certification on a case-by-case basis after specialized medical evaluations to confirm adequate recovery and function and the absence of significant risk in terms of the aviation environment.

These regulations clarify long-standing FAA policy. Previously, the FAA has denied medical certification to airmen with cardiac valve replacement, pacemaker implantation, or heart transplant under the current general medical standards. In the final rule, a medical history of cardiac valve replacement, pacemaker implantation, or heart transplant is disqualifying. A person with such a medical history, however, may apply for and possibly receive, a special issuance of a medical certificate. The FAA will continue to monitor medical technology in this area and will reassess these rules as developments warrant.

Blood Pressure (Proposed §§ 67.111(b), 67.211(b), and 67.311(b)). The proposed rule revises the blood pressure standards established in 1959 applicable to first-class medical certificates. The current table of age-related maximum blood pressure readings for applicants for first-class medical certificates and the reference to ''circulatory efficiency'' are deleted, and a requirement that average blood pressure while sitting not exceed 150/95 millimeters of mercury is added for applicants of all classes. A medical assessment is specified for all applicants who need or use antihypertensive medication to control blood pressure.

Comments: Four AME's support the proposed blood pressure standard, but one requests that the AME make some notation as to whether this is achieved by approved antihypertensive medication. JAA suggests further assessment of applicants whose blood pressure level is not ''consistently 160/95'' or lower.

The Boeing Employees Soaring Club, ALPA, USPA, NATA, GAPA, NAAA, three AME's, and many individual commenters do not support the proposed blood pressure standard. They say that it would increase the cost of medical care, would require costly cardiovascular work-ups for people who would not otherwise require therapy, and is not supported by medical data or accident information. Many commenters and one AME do not support the proposal because, according to these commenters, blood pressure naturally increases with age.

ALPA and Boeing Employees Soaring Club say a blood pressure reading could be affected by many factors, including time of day, daily stress, or fear of a visit to their physician, and that the FAA should not have a set blood pressure level in the rule.

AOPA, EAA, and several commenters, including doctors, say that the FAA should not disqualify persons whose blood pressure is stabilized at a lower level with therapy. According to commenters, in the NPRM the FAA implies that treated hypertension is more of a risk than the condition of high blood pressure.

FAA Response: After careful consideration of all the comments and testimony, the FAA has decided to eliminate specific blood pressure requirements in the final rule. For all classes, the final rule makes no specific reference to blood pressure but, rather, requires that the appropriate general medical standard in §§ 67.113(b), 67.213(b), and 67.313(b) be met.

The FAA has determined that a blood pressure standard is unnecessary. Each person's medical condition and treatment regimen, if any, will continue to be evaluated on an individual basis. While the use of an antihypertensive medication is not made specifically disqualifying, a person may be required to undergo further medical assessment.

Electrocardiograms (Proposed §§ 67.111 (c) and (d) and 67.211(d)); Final §§ 67.111 (b) and (c)). The NPRM proposed to add a new requirement for routine resting electrocardiograms (ECG) for second-class medical certification. Applicants would have an ECG after reaching age 35 and every 2 years after reaching age 40. An ECG requirement currently exists for first-class applicants; however, first-class applicants must have an initial ECG after the 35th birthday and annually after reaching age 40. The NPRM did not propose to add an ECG requirement for third-class applicants. The NPRM also proposed to change the validity period for an ECG to meet the requirements of a medical examination. Currently, an ECG made within 90 days before a medical examination can be used to satisfy the first-class application requirement. The proposal was to change to this to 60 days.

Comments: The AMA, ATA, JAA, and two AME's support the proposal.

ASMA, NATA, NAAA, EAA, GAPA, and ALPA do not support the proposal to require ECG's for second-class applicants. National Business Aircraft Association (NBAA), ASMA, AOPA, and EAA cite the lack of cardiac incapacitation as a causal factor in aviation accidents. Many commenters, including doctors, do not support the requirement to administer ECG tests to asymptomatic persons. Six AME's say that the ECG does not predict sudden incapacitation.

A majority of commenters stress the financial burden that ECG testing would create on those who need second-class medical certificates. According to commenters, the FAA's cost estimate for ECG's does not account for the cost to AME's of purchasing the equipment and modems to transmit the readings to the Civil Aeromedical Institute. The ECG test would also increase the amount of time an AME would spend on each pilot. AOPA notes that the FAA anticipates 1,800 applicants will not meet ECG standards, and would have to undergo the cost of additional evaluation to determine eligibility for a medical certificate. AOPA also noted that the FAA's regulatory evaluation estimated that 90 percent of these applicants would ultimately be granted medical certificates. AOPA believes the ECG requirement and follow-up testing is a waste of time and money. The Soaring Society of America suggests that an applicant's regular medical facility could perform this test and certify it to the AME, which would prevent redundant tests and lower the cost and complexity of obtaining the second-class medical certificate.

FAA Response: After careful consideration of the comments and testimony received, the FAA has decided to withdraw the proposal for an ECG requirement for second-class medical certification. There was limited support for the proposal within the medical community; and several aviation associations (including an aeromedical association), AME's, and individuals commented that the cost of implementing this proposal cannot be justified when compared with the current, limited-prognostic capabilities of the routine resting ECG.

The existing ECG requirement for first-class medical certification, an initial ECG after the 35th birthday and annual ECG's after reaching age 40, remains in the final rule. The change from 90 to 60 days for using an ECG to satisfy the first-class medical certification requirement also remains in the final rule. The FAA has determined that the ECG requirement for first-class medical certification, normally held by airline transport pilots, is consistent with the highest level of safety and is cost effective when coupled with the semi-annual examination required for that certificate. An airman holding a first-class medical certificate receives the highest level of medical scrutiny (i.e., semi-annual examination) because of the nature of his or her employment; the annual ECG is one element of this frequent, multi-factorial, medical surveillance.

Most commercial ''commuter'' operations (e.g., passenger operations of a turbojet airplane, passenger operations of an airplane having a passenger seating configuration of 10 seats or more, or passenger operations of a multiengine airplane being operated by a commuter air carrier) require pilots to have first-class medical certificates. The remaining population of commercial pilots (e.g., pilots of commuter passenger operations with airplane passenger seating configuration of 9 seats or less; flight instructors; pilots of crop dusting, banner towing, powerline, pipeline inspection operations) is required to hold a second-class medical certificate. As previously stated, the FAA has determined that biennial ECG's for these commercial pilots are not cost effective and that these pilots do not require the same level of medical scrutiny, given their employment, as pilots who are required to have a first-class medical certificate. The FAA, however, will continue to monitor and evaluate the medical/flying histories of those pilots required to have a second-class medical certificate and will, if appropriate, impose an ECG requirement in the future.

Finally, the public should be aware that the FAA uses the ECG to evaluate the medical fitness of second-class medical certificate applicants when sound medical judgment indicates that the test would be reasonable and useful. The FAA routinely requests an ECG when an individual has or may have a medical history or clinical diagnosis of a variety of medical conditions, including cardiovascular disease, hypertension, dysrhythmia, diabetes, peripheral vascular disease, cerebral vascular disease, cardiomyopathy, valvular heart disease, congenital heart disease, or a previously abnormal ECG. The FAA will continue to use the ECG as a diagnostic tool in appropriate situations.

Anticoagulant medications (Proposed §§ 67.111(c), 67.211(c), and 67.311(c)). The proposed rule adds the provision that persons applying for first-, second-, or third-class medical certificates must not use anticoagulant medication.

Comments: EAA, AOPA, two AME's, and several individuals state that the proposed rule is subject to interpretation and could, for example, include aspirin. The two AME's say that the FAA needs to differentiate between anticoagulant and antiplatelet medications regarding which are disqualifying. AOPA says disqualification should be based on the applicant's disease, not on the medicine taken, unless there are specific side effects that directly affect the safety of flight.

EAA supports the prohibition of heparin. AOPA says coumadin use should not be disqualifying, since its track record is well established.

FAA Response: The FAA did not intend for antiplatelet medications (e.g., aspirin) to be included as anticoagulants. After careful consideration of the comments and testimony received, the FAA has decided to withdraw the proposal to add anticoagulant use as a specifically disqualifying medication since the use of these medications could be found disqualifying in this final rule under paragraph (c) of the general medical condition section (see §§ 67.113(c), 67.213(c), and 67.313(c)), of part 67.

Cholesterol Testing (Proposed § 67.111(f))

The current rule contains no cholesterol standards. The proposed rule adds a new total blood cholesterol testing requirement for first-class applicants after they reach age 50, and annually thereafter. A blood cholesterol level of 300 milligrams per deciliter or more requires applicants to undergo further evaluation. If otherwise eligible, the applicant would be issued a medical certificate pending results of the evaluation.

Comments: The vast majority of individual commenters, as well as NBAA, AOPA, ASMA, and EAA, do not support the proposed requirement for total blood cholesterol determination for first-class medical certification. AOPA, NATA, and ALPA say some individuals believe that the test is invasive and a personal health matter to be discussed with a private physician, not with the FAA. AOPA, EAA, two AME's, and several individuals say factors other than total cholesterol contribute to coronary artery disease. Since the AMA study, Allied Pilots Association (APA), EAA, two AME's and several others note, high density lipoprotein (HDL) and low density lipoprotein (LDL) have been found to better correlate with coronary artery disease (CAD) than total cholesterol.

Nearly half of the AME commenters state that cholesterol testing is not needed because it does not predict an applicant's ability to perform safely. One AME notes that 50 percent of all myocardial infarctions occur in people with cholesterol ranging between 180 and 220, levels well below the FAA's proposed evaluation threshold of 300. NBAA and APA say the link between incidence of high serum cholesterol and aircraft accidents caused by pilot incapacitation is tenuous at best. APA suggests that the FAA consider reviewing cardiovascular risk factors every 3–5 years to develop other, more appropriate measures of cardiovascular risk.

FAA Response: After careful consideration of the comments and testimony received, the FAA has decided to withdraw the proposal to measure the total cholesterol of applicants for first-class medical certification. Several aviation associations, AME's, and individuals commented that there is no scientific evidence that demonstrates the relationship between a specific cholesterol value and the existence of identifiable pathology that represents a threat to aviation safety. Commenters pointed out that a different understanding exists today about total cholesterol level, per se, and pathology compared to when the data that supported the original proposal were compiled. Cholesterol testing, as proposed, is not cost effective. The FAA encourages airmen to have their lipid levels checked as a health measure but is not requiring airmen to do so in the final rule.

Diabetes (§§ 67.113(a), 67.213(a), and 67.313(a))

No change is proposed to the standards concerning airmen with diabetes, currently set forth in paragraph (f)(1) of §§ 67.13, 67.15, and 67.17. In the preamble to the proposed rule, however, FAA states that it has determined that persons who do not meet the medical standard because their diabetes requires oral hypoglycemic drugs would no longer be categorically denied special issuance of airman medical certification. This policy would apply to individuals whose diabetes is without complications and acceptably controlled by diet and oral drugs with appropriate monitoring and other conditions. However, this policy change does not affect the long-standing FAA policy and practice that a diabetic using insulin for control is not eligible for unrestricted or restricted medical certification.

Comments: Two AME's believe that insulin-dependent diabetics should not be allowed any type of pilot's license.

USPA says insulin-dependent diabetics should be acceptable on a case-by-case basis. One commenter believes that diabetic private or recreational pilots should be certificated if their diabetes is under good control.

EAA, two other AME's, and many individuals support permitting noninsulin-dependent diabetics to obtain special issuance.

A few commenters state that it is unrealistic to exclude all users of hypoglycemic drugs, as proposed in the NPRM. One diabetic noted that 50 percent of men over 65 have ''Diabetes II,'' which does not require insulin or anything other than a mild drug.

FAA Response: After careful consideration of the comments and testimony received as well as the petitions and comments received to docket Nos. 26281 and 26493, the FAA has determined that the current consensus of the medical community supports the FAA position. Many individuals who are not insulin-treated diabetics can, with appropriate monitoring and other conditions, receive a special issuance of their medical certificates to perform the duties authorized by their class of medical certificate without endangering public safety. The final rule is the same as the current rule.

Also, the FAA has determined that, rather than engaging in rulemaking concerning diabetes, it is more appropriate to reexamine its policy on special issuance of medical certificates to persons with insulin-treated diabetes mellitus. On December 29, 1994, subsequent to publication of the NPRM, the Federal Air Surgeon requested comments on a possible policy change with respect to individuals who have a clinical diagnosis of insulin-treated diabetes mellitus (59 FR 67246, December 29, 1994). The docket for this notice closed on March 29, 1995. The FAA will review the comments and testimony received in Docket Nos. 26493 and 27940 concerning diabetes and will publish in a separate notice the agency's determination concerning its policy on special issuance of medical certificates to persons with insulin-treated diabetes mellitus.

Special Issuance (§ 67.401)

Proposed § 67.401(a) limits the duration of any medical certificate issued under the special issuance procedures of this section to the duration of an Authorization for special issuance. When the Authorization expires, or if the FAA withdraws the Authorization, the medical certificate issued pursuant to that Authorization also expires.

Comments: AOPA and IPA say that the extra requirements for special issuance procedures should be withdrawn because they will increase the burden on FAA to write exceptions (especially in a time of government budget cutting and staff reductions), and because applicants will have to pay more and bet their livelihood with each reaffirmation request.

FAA Response: The FAA, after careful consideration of all the comments and testimony received as well as the petitions and comments received to Docket No. 25787, has decided to retain the requirement limiting duration of any class medical certificate to the duration of an Authorization. This will ensure that the medical justification for the special issuance remains valid and the holder of the special issuance undergoes appropriate periodic reevaluation. This change explicitly connects the duration of any special issuance medical certificate to the validity of the document upon which it is based and requires periodic requests for reissuance. The FAA foresees no significant additional administrative burden on the FAA.

The FAA has included specific requirements for an Authorization in the rule language in order to provide procedures for legal documentation and control of validity periods, followup requirements, withdrawals, and functional or operational limitations.

Incorrect Statements by Applicants (§ 67.401(f)(5) and 67.403(c))

The proposed rule broadens the regulatory basis for action when an applicant or airman provides incorrect information when applying for medical certification. Proposed §§ 67.401(f)(5) and 67.403(c) would allow the FAA the option of denying, suspending, or revoking an airman medical certificate and denying or withdrawing an Authorization or SODA, not only when the holder makes a fraudulent or intentionally false statement, but also when the holder makes an incorrect statement in support of a request for a medical certificate, an Authorization, or SODA or in an entry in any logbook, record, or report that is kept, made, or used to show compliance with the medical certificate, Authorization, or SODA. A suspension, revocation, or withdrawal could occur even if the person did not knowingly make the incorrect statement or entry.

Comments: One AME supports the Authorization and SODA withdrawal proposals.

EAA says the proposed § 67.403(c) statement concerning unknowingly false statements should only call for a review of the medical certificate and possible revocation, if warranted by the corrected information. AOPA notes that the Federal Aviation Act says applicants denied issuance or renewal of a certificate may have an NTSB hearing.

NATCA, IPA, APA, four AME's, and a large number of individual commenters are concerned about what they view as the lack of due process in the decision to withdraw the Authorization. According to these commenters, many innocent errors are made on the applications due to the applicant's unclear memory or misunderstanding of terms on the application. These commenters suggest that the FAA require the AME to contact the pilot and provide a chance to explain and correct the incorrect statements. Commenters say that the wording creates too ambiguous an authority for the FAA and creates the potential for action by the FAA against almost any pilot. Some associations are concerned that individuals whose

applications or certificates are denied may actually lose their jobs without benefit of an opportunity to clarify unintentional discrepancies.

FAA Response: The FAA noted in the preamble to the NPRM its concern that medical certification based on incorrect medical data may be inappropriate in the light of the true data. The current regulations do not explicitly provide for withdrawal of an Authorization or SODA or suspension or revocation of a medical certificate when unknowingly incorrect statements are relied upon in the FAA's decision to issue an Authorization, SODA, or medical certificate. The FAA's intent in including language on incorrect statements is to provide a basis for appropriate action when a person provides such unknowingly incorrect information that is relied on by the agency in its decision. The withdrawal, suspension, or revocation in this case is not meant to be punitive, but rather corrects the inappropriate granting of an Authorization, SODA, or medical certificate. The final rule clarifies the FAA's intent by including language in § 67.403(c) that limits the reference to ''incorrect statements'' to those ''upon which the FAA relied.''

Return of Medical Certificate (§§ 67.401(i)(4) and 67.415)

Proposed § 67.401(i)(4) requires surrender to the Administrator of a medical certificate rendered invalid pursuant to a withdrawal in accordance with § 67.401(a). The proposal also adds a requirement in § 67.415 to specify that the holder of a medical certificate that is suspended or revoked must return the medical certificate to the Administrator.

Comments: EAA says that presently airmen are not required to return their medical certificates without a hearing before the NTSB; procedures now exist for emergency suspension or revocation of a certificate based on false information. Therefore, EAA believes there is no need for this requirement. Three AME's believe that the added requirement for mandatory return of a medical certificate at the request of the Administrator would open the whole process of medical certification to potential abuse by the FAA and should be deleted. Several individuals state that this provision is unnecessary and should be withdrawn; the current rules are sufficient to ensure that pilots fly only with a valid medical certificate.

FAA Response: Current § 67.27(g) provides that the holder of a medical certificate shall surrender it, upon request of the FAA, if its issuance is wholly or partly reversed upon reconsideration. After careful consideration of all the comments and testimony received, the FAA has determined that the language, as proposed, codifies existing practice, parallels the procedures with airman certificates, and clarifies the FAA's intent to require the return of medical certificates that have become invalid. The retention by an airman of an invalid medical certificate is not consistent with proper and efficient enforcement of safety regulations because of the apparent authority of these documents. Inclusion of this requirement, however, does not in any way affect the certificate holder's administrative review or appeal rights.

Regulatory Evaluation Summary

Introduction

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs Federal agencies to promulgate new regulations or modify existing regulations only if the potential benefits to society justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic impact of regulatory changes on small entities. Finally, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these assessments, the FAA has determined that this rule: (1) Will generate benefits exceeding its costs and is not ''significant'' as defined in Executive Order 12866; (2) is not ''significant'' as defined in DOT's Policies and Procedures; (3) will not have a significant impact on a substantial number of small entities; and (4) will not constitute a barrier to international trade. These analyses, available in the docket, are summarized below.

The majority of the amendments will have insignificant attributable costs and benefits. This evaluation does not address the minor amendments such as changes in syntax, technical corrections, reorganization, updating medical terminology, or adjustments to cross references for conformance purposes.

Furthermore, the evaluation attributes no significant costs or benefits to several other amendments that add a specific disease or medical condition to the list of medical standards. Such additions do not necessarily constitute a change in the standards. Existing regulations include three open-ended (general) medical standards that cover:

> (1) any other personality disorder, neurosis, or mental condition . . ., (2) any other organic, functional, or structural disease, defect, or limitation . . ., and (3) no medication or other treatment . . . .

that the Federal Air Surgeon finds would make, or may reasonably be expected to make, the applicant unable to perform the duties associated with the airman certificate. Thus, the applicable medical standards

are not limited to those actually listed in the regulation. As medical knowledge and experience progress, the Federal Air Surgeon may find a previously unlisted disease or condition to be grounds for withholding or restricting a medical certificate, so long as that finding is based on qualified medical judgment.

The addition of specifically disqualifying medical conditions under the amended standards could cause a small number of airmen, who currently hold medical certificates as a result of an order of the National Transportation Safety Board (NTSB) to be disqualified from further medical certification. These airmen were denied medical certification by the FAA under the current general medical standards. For example, the FAA has denied medical certification to airmen who have had cardiac valve replacement and the NTSB has ordered medical certification in some of these cases. Under the amended standards a medical history of cardiac valve replacement is specifically disqualifying and those airmen will no longer be entitled to medical certification. It is expected, however, that medical certification of the affected individuals will continue under the Federal Air Surgeon's special issuance authority once the FAA evaluates the case and is satisfied that the airman's condition has not worsened since the NTSB ordered medical certification. As such, the expected economic impact of the specifically disqualifying medical conditions will be minor.

Discussion of Comments Addressing Economic Evaluation

This section of the summary responds to comments concerning the economic evaluation of the NPRM. The NPRM for this rule included five significant proposals that were withdrawn after careful consideration of the comments received. This section notes, but does not address comments concerning the regulatory evaluation of the withdrawn proposals, since such comments are no longer pertinent.

Comment: The U.S. Small Business Administration (SBA) states in its comment that the FAA's regulatory flexibility analysis for the NPRM does not conform to the Regulatory Flexibility Act (RFA), and that a proper regulatory flexibility analysis must be performed prior to issuing a final rule.

FAA Response: The FAA does not agree. Federal agencies are required to prepare a regulatory flexibility analysis only if the proposed rule would have a significant economic impact on a substantial number of small entities.[1] The NPRM would not have had such impact and this was stated. The SBA also notes that no explanation was provided to support that determination. The FAA agrees and provides the following table of explanation.

Medical certification category	NPRM 10-year present value	NPRM annualized costs	Active airmen	Average cost per year per active airman
First-class	$5,700,000	$811,551	147,676	$5.50
Second-class	22,700,000	3,231,969	173,435	18.64
Third-class	5,600,000	797,314	325,996	2.45

As shown above, the average annualized cost impact of the proposed rule would have ranged from $2.45 to $18.64 per person subject to medical certification requirements. It would be statistically impossible for the impact of the proposed rule to exceed these averages to such an extent as to have a significant impact (multiple thousands of dollars annually depending on the entity type) on a substantial number (at least one-third) of small entities; even if the rule only affected small entities. Similarly, since the costs of the final rule are approximately 20 percent of the NPRM costs, it follows that the final rule also will not have a significant economic impact on a substantial number of small entities.

Comments: Several associations and numerous individual commenters find it illogical to draw inferences for pilots from the air traffic controllers who were monitored in the Johns Hopkins study. The reasons cited by the commenters include air traffic control (ATC) work is inherently stressful, ATC work is sedentary, controllers are exposed to cathode ray tube monitors and indoor air, controllers have a history of strife between labor and management, and they work on varying shifts.

FAA Response: The FAA disagrees. The Hopkins study was expressly used to quantify the relative differences of primary pathology incidence across age cohorts. The Hopkins results are conclusively supported by other general medical investigation as well as the FAA's own medical certification data for pathology incidence and application denials.

[1] *A Guide to Federal Agency Rulemaking,* 2nd edition; Administrative Conference of the United States; 1991; p. 162.

Comments: Four national aviation associations strongly disagree with the NPRM proposal to reduce the duration of third-class medical certificates for persons age 70 and older. The commenters assert that the benefits have not been demonstrated and that the statistical analysis FAA used to confirm that the incidence of pathology related accidents increases with age is supported by an insufficient sample size.

FAA Response: After careful consideration of the testimony and comments received, the FAA has withdrawn this proposed provision.

Comments: Numerous individual commenters stated that the proposed higher standards for blood pressure would prove costly to pilots with borderline pressure measurements and that the affected individuals would be required to take extensive additional testing.

FAA Response: After careful consideration of the testimony and comments received, the FAA has withdrawn this proposed provision.

Comments: Six major associations disagree with the provision for electrocardiograms, second class and assert that the frequency of medically related aviation accidents, the majority of which are not predictable, does not support the administrative and economic burdens that would be imposed on the affected applicants. Two associations assert that the 40-percent effectiveness level that was assumed in the evaluation is questionable and is a significant error in the cost-benefit analysis. Five associations, two AME's, and numerous individual commenters state that the FAA's cost estimate does not account for the cost for AME's to purchase the necessary medical equipment and modems. They warn that some AME's may withdraw their participation rather than incur the additional costs.

FAA Response: After careful consideration of the testimony and comments received, the FAA has withdrawn this proposed provision.

Comments: Several associations assert that requiring a cholesterol test would be a significant administrative and cost burden. One association stated that the regulatory evaluation employed an average laboratory test cost of $10, but that costs range between $15 and $16 in the Washington, D.C. area. One individual commenter asserts that the cost-benefit analysis is flawed because it based cost savings on a cholesterol level lower than 300, and because the analysis assumed that all heart attacks studied represented individuals with critically high cholesterol.

FAA Response: After careful consideration of the testimony and comments received, the FAA has withdrawn this proposed provision.

Comments: One major association states that the addition of the intermediate vision, first and second class is unnecessary and unwarranted, and that it would add costs with no significant safety benefit.

FAA Response: The FAA does not agree. The evaluation estimated that the direct testing costs, including applicant time, would range from $1.30 to $3.86 per year per applicant age 50 and older. Additional costs (for glasses and examinations) would only be incurred by those persons whose intermediate vision was, in fact, deficient, and who could not satisfactorily read their flight instruments. The FAA maintains that these costs are not unreasonable, and that the benefits of commercial pilots being able to read flight instruments are conclusive.

Costs and Benefits That Are Not Quantified

Prior to summarizing the evaluation of the substantive provisions, it is important to note one category of costs and one category of benefits that have not been quantified in this analysis. The evaluation does not explicitly quantify the economic consequences to those individuals who could lose their pilot medical certificate privileges as a result of the additional medical tests or standards. Where such consequences are expected, the evaluation estimates the numbers of persons who may be denied but does not attribute a cost to those actions.

It is recognized that the denial of pilot privileges could mean the loss of a highly valued avocation for some individuals. For others, it could actually result in the loss of primary livelihood. An accurate assessment of the economic valuation of the denials that are projected under the rule is beyond the scope of the evaluation.

At the same time, the evaluation also does not quantify the overwhelming personal health benefits, external to flight safety, that will be afforded to those individuals whose medical conditions will be detected and whose treatment will be enabled by the new tests and standards. On average, third-class medical certificate holders spend only 0.7 percent of their time flying. The evaluation only quantifies the direct benefits of the rule to reduced aviation accidents.

Under existing regulations, the Federal Air Surgeon is charged to deny a medical certificate in those cases where a disease or other physical or mental condition would make, or may be reasonably be expected to make, the applicant unable to perform the duties associated with the medical certificate. Such findings are not capricious, but instead, are based on the case history of the individual and on appropriate, qualified medical judgment. The FAA holds that the severity of a disease or medical condition necessary to warrant a denial is such that the aviation safety and personal health benefits of that action will always exceed the costs associated with the loss of pilot privilege.

Summary of Quantified Costs and Benefits

Vision Amendments, All Classes. The final rule institutes additional vision tests and standards for all three classes. For first- and second-class medical certificate applicants age 50 and older, it adds a new standard (20/40 or better, Snellen equivalent) and a new test for intermediate vision (near vision at 32 inches). Applicants for third-class medical certificates will be subject to a new standard (20/40 or better) and a new test for near vision (16 inches).

The projected 10-year costs of the intermediate vision amendment for first-class medical certificate applicants are: (1) $1.4 million in primary testing costs, (2) $2.1 million in follow-up compliance costs (examinations and glasses) for those persons who would not meet the standard, and (3) $6,147 in direct processing costs for the expected 15 additional persons who could be denied under the provision. In total, it is expected that the intermediate vision amendment for first-class medical certificate applicants would impose an incremental 10-year cost of $3.5 million, with a 1995 present value of $2.5 million.

The projected 10-year costs of the intermediate vision amendment for second-class medical certificate applicants are: (1) $442,224 in primary testing costs, (2) $2.0 million in follow-up compliance costs (examinations and glasses) for those persons who would not meet the standard, and (3) $6,626 in direct processing costs for the expected 17 additional persons who would be denied under the provision. In total, it is expected that the intermediate vision amendment for second-class medical certificate applicants would impose an incremental 10-year cost of $2.4 million, with a 1995 present value of $1.7 million.

The projected 10-year costs of the near vision amendment for third-class medical certificate applicants are: (1) $2.3 million in primary testing costs, (2) $1.1 million in follow-up compliance costs (examinations and glasses) for those persons who would not meet the standard, and (3) $129,690 in direct processing costs for the expected 330 additional persons who would be denied under the provision. In total, it is expected that the near vision amendment for third-class medical certificate applicants would impose an incremental 10-year cost of $3.5 million, with a 1995 present value of $2.5 million. It is emphasized that the denials and costs associated with the near vision requirement are not wholly attributable to the amendment. Although this requirement does not exist in current regulations, the requirement has been in place administratively for some time. Thus, the associated costs are being and would continue to be incurred without this amendment. The economic evaluation of this requirement is provided as information to assess the fact the requirement would explicitly be added to the regulations.

In assessing the benefits of the vision amendments, NTSB accident records were investigated for the periods from 1962 through 1989 for commercial flights and from 1982 through 1989 for general aviation. For these periods, no accident was found where intermediate or near vision deficiency was specifically determined to be the cause. As such, the FAA is not able to quantitatively ascribe the benefits of the three vision amendments based solely on historical accident analysis.

Notwithstanding the absence of documented accidents related to these three provisions, the FAA maintains that such accidents may well have occurred and would continue to occur in the absence of the amendments. The NTSB accident analysis system may not document those cases where a near or intermediate vision problem caused or contributed to accidents. Examples would include deviations from course or altitude, inaccurate monitoring of gauges and other avionics displays, and incorrect setting of aeronautical parameters such as headings or radio frequencies.

While the extent to which intermediate or near vision problems have caused such accidents is unknown, it is the FAA's position that: (1) general aviation pilots require adequate near vision to read charts and checklists, and (2) commercial pilots require adequate intermediate vision to properly monitor aircraft instruments. Although this evaluation is not able to quantify the benefits of the vision amendments, the FAA holds that the benefits will be significant and will exceed the expected costs.

Part 61, Medical Certificate Validity Period, Third-Class. Under the final rule, persons under age 40 will generally only be required to undergo a physical examination every 3 years. Medical certificates for persons age 40 and older will continue to be valid for 2 years.

Other than minor administrative costs to effect the new procedure, there will be no direct expenditures associated with the amendment. In addition, careful consideration of all comments and testimony received,

as well as the petitions and comments received to Docket Nos. 24932, 26281, and 27473, leads the FAA to conclude that extending the duration between medical examinations can be done with no detriment to safety in the case of younger airmen, who are much less likely to suffer medical incapacitation.

The FAA has investigated the relative primary pathology incidence rates for persons under and over 40 years of age. As a group, persons under age 40 exhibit 1/27 of the pathology incidence rate of persons 40 and older. Even weighting these rates, by the numbers of pilots by age class, results in an ''under age 40'' incidence equal to 1/6 that of third-class medical certificate applicants age 40 and older.

The FAA's position on this issue is further supported by a review of the pertinent accident data. National Transportation Safety Board (NTSB) data were reviewed for the period 1982 through 1989. During that period, 259 pathology related, general aviation accidents occurred. Only two of those accidents, however, involved private pilots under age 40 with a potentially detectable primary pathology. One case involved a 37-year-old pilot with a valid medical certificate who suffered a heart attack that had not been predicted. The second accident involved a 25-year-old with a vasovagal syncope who was flying without a medical certificate.

As with all age groups, those individuals under age 40 manifesting conditions that represent a risk to safety will be denied medical certification or, if they apply for and receive a special issuance of a medical certificate, will be restricted in their flying activities and/or examined more thoroughly and frequently.

The primary benefits of this amended provision will derive from the annual reduction in third-class medical certificate applications. FAA compared the projected numbers of applications under the existing 2 year duration for all ages, against the applications that are expected under the final rule provision extending the duration for persons under age 40 to 3 years. Applications under the final rule were computed by reducing the projected applications for persons under age 40 by a factor of two-thirds. Over the 10-year study period, the part 61 provision is expected to reduce applications by 268,000.

Each avoided examination is valued at $89, consisting of $50 in direct testing costs, and one and one-half hours of the applicant's time valued at $29 per hour. This produces an expected 10-year savings of $23.9 million, with a 1995 present value of $16.7 million, not counting FAA processing costs.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily or disproportionately burdened by Government regulations. The RFA requires a Regulatory Flexibility Analysis if a rule would have a significant economic impact, either detrimental or beneficial, on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, provides threshold cost and small entity size standards for complying with RFA review requirements in FAA rulemaking actions.

The rule is estimated to have a 10 year, 1995 present value cost of $6.6 million, which equates to an annualized cost of $940,000 to the approximately 647,100 active airmen. The average annualized effect per airman is projected to equal $1.45. In light of this information, the FAA finds that the amendment will not have a significant economic impact on a substantial number of small entities.

International Trade Impact Assessment

The final rule will have little or no impact on trade for both U.S. firms doing business in foreign countries and foreign firms doing business in the United States.

Federalism Implications

The regulations herein would not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12866, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Evaluation and the International Trade Impact Analysis, the FAA has determined that this rule is not major under Executive Order 12866. In addition, the FAA certifies that this rule will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This rule is considered significant under DOT Regulatory Policies and Procedures (44

FR 11034; February 26, 1979). A regulatory evaluation of the rule, including a Regulatory Flexibility Determination and Trade Impact Analysis, has been placed in Docket 27940. A copy may be obtained by contacting the person identified under ''FOR FURTHER INFORMATION CONTACT.''

Paperwork Reduction Act

The paperwork burden associated with part 67 is currently approved under OMB number 2120–0034. There is small reduction in paperwork associated with this final rule.

Derivation and Distribution Tables

The Derivation Table below shows the source in current part 67 on which each paragraph of each section of revised part 67 is based. The Distribution Table below shows where each current part 67 section and paragraph can be found in the revised part 67.

Derivation Table

Revised section	*Based On*
	Subpart A
Section	
67.1	Current §§ 67.1 and 67.21.
67.3	Current § 67.11.
67.5	Current § 67.12.
67.7	Current § 67.3.
	Subpart B
Section	
67.101	Current § 67.13(a) and new language.
67.103(a)	Current § 67.13(b)(1).
67.103(b)	Current § 67.13(b)(2) and new language.
67.103(c)	Current § 67.13(b)(3) and new language.
67.103(d)	Current § 67.13(b)(4).
67.103(e)	Current § 67.13(b)(5).
67.103(f)	Current § 67.13(b)(6) and flush paragraph.
67.105(a)	Current § 67.13(c)(1) and new language.
67.105(b)	Current § 67.13(c)(2), (c)(3), (c)(4), (c)(5), and new language.
67.105(c)	Current § 67.13(c)(6) and new language.
67.107(a)	Current § 67.13(d)(1)(i) and new language.
67.107(b)	New language.
67.107(c)	Current § 67.13(d)(1)(ii) reordered.
67.109(a)	Current § 67.13(d)(2)(i) and new language.
67.109(b)	Current § 67.13(d)(2)(ii).
67.111(a)	Current § 67.13(e)(1) and new language.
67.111(b)	Current § 67.13(e)(2) and (3) and new language.
67.111(c)	Flush paragraph after current § 67.13(e)(5) as modified.
67.113(a)	Current § 67.13(f)(1).
67.113(b)	Current § 67.13(f)(2).
67.113(c)	Current § 67.13(f)(3), added September 9, 1994.
67.115	Current § 67.13(g).
	Subpart C
Section	
67.201	Current § 67.15(a) and new language.
67.203(a)	Current § 67.15(b)(1).
67.203(b)	Current § 67.15(b)(2) and new language.
67.203(c)	Current § 67.15(b)(5) and new language.
67.203(d)	Current § 67.15(b)(3).
67.203(e)	Current § 67.15(b)(4) and new language.
67.203(f)	Current § 67.15(b)(6) and flush paragraph.
67.205(a)	Current § 67.15(c)(1) and new language.
67.205(b)	Current § 67.15(c)(2), (c)(3), (c)(4), (c)(5), and new language.
67.205(c)	Current § 67.15(c)(6) and new language.
67.207(a)	Current § 67.15(d)(1)(i) and new language.

Derivation Table—Continued

Revised section	*Based On*
67.207(b)	New language.
67.207(c)	Current § 67.15(d)(1)(ii) reordered.
67.209(a)	Current § 67.15(d)(2)(i) and new language.
67.209(b)	Current § 67.15(d)(2)(ii) and new language.
67.211	Current § 67.15(e)(1) and new language.
67.213(a)	Current § 67.15(f)(1).
67.213(b)	Current § 67.15(f)(2).
67.213(c)	Current § 67.15(f)(3), added September 9, 1994.
67.215	Current § 67.15(g).
	Subpart D
Section	
67.301	Current § 67.17(a) and new language.
67.303(a)	Current § 67.17(b)(1) and new language.
67.303(b)	New language.
67.303(c)	Current § 67.17(b)(3) and new language.
67.303(d)	Current § 67.17(b)(2) and new language.
67.305(a)	Current § 67.17(c)(1) and new language.
67.305(b)	Current § 67.17(c)(2) and (3), and new language.
67.305(c)	Current § 67.17(c)(4) and new language.
67.307(a)	Current § 67.17(d)(1)(i) and new language.
67.307(b)	New language.
67.307(c)	Current § 67.17(d)(1)(ii) reordered.
67.309(a)	Current § 67.17(d)(2)(i) and new language.
67.309(b)	Current § 67.17(d)(2)(ii) and new language.
67.311	Current § 67.17(e)(1) and new language.
67.313(a)	Current § 67.17(f)(1).
67.313(b)	Current § 67.17(f)(2).
67.313(c)	Current § 67.17(f)(3), added September 9, 1994.
67.315	Current § 67.17(g).
	Subpart E
Section	
67.401(a)	Current § 67.19(a) and new language.
67.401(b)	New language.
67.401(c)	Current § 67.19(b).
67.401(d)	Current § 67.19(d) and new language.
67.401(e)	Current § 67.19(c).
67.401(f)	New language.
67.401(g)	Current § 67.19(e) and new language.
67.401(h)	Current § 67.19(f) and new language.
67.401(i)	New language.
67.401(j)	New language.
67.403(a)	Current § 67.20(a) and new language.
67.403(b)	Current § 67.20(b) and new language.
67.403(c)	New language.
67.405(a)	Current § 67.23(a).
67.405(b)	Current § 67.23(b).
67.407(a)	Current § 67.25(a) and new language.
67.407(b)	Current § 67.25(a) flush paragraph and new language.
67.407(c)	Current § 67.25(b), as amended September 9, 1994, and new language.
67.407(d)	Current § 67.25(c).
67.409(a)	Current § 67.27(a).
67.409(b)	Current § 67.27(b), as amended September 9, 1994.
67.409(c)	Current § 67.27(c).
67.409(d)	Current § 67.27(d).
67.411(a)	Current § 67.29(a).
67.411(b)	Current § 67.29(b).
67.411(c)	Current § 67.29(c).

Derivation Table—Continued

Revised section	*Based On*
67.413(a)	Current § 67.31.
67.413(b)	New language.
67.415	New language.

Distribution Table

Current Section	*Revised Section*
	Subpart A
Section	
67.1	§ 67.1.
67.3	§ 67.7.
67.11	§ 67.3.
67.12	§ 67.5.
67.13(a)	§ 67.101.
67.13(b)	§ 67.103.
67.13(c)	§ 67.105.
67.13(d)	§ 67.107 and § 67.109.
67.13(e)	§ 67.111 and § 67.113(b).
67.13(f)	§ 67.113.
67.13(g)	§ 67.115.
67.15(a)	§ 67.201.
67.15(b)	§ 67.203.
67.15(c)	§ 67.205.
67.15(d)	§ 67.207 and § 67.209.
67.15(e)	§ 67.211.
67.15(f)	§ 67.213.
67.15(g)	§ 67.215.
67.17(a)	§ 67.301.
67.17(b)	§ 67.303.
67.17(c)	§ 67.305.
67.17(d)	§ 67.307 and § 67.309.
67.17(e)	§ 67.311.
67.17(f)	§ 67.313.
67.17(g)	§ 67.315.
67.19	§ 67.401.
67.20	§ 67.403.
	Subpart B
Section	
67.21	§ 67.1.
67.23	§ 67.405.
67.25	§ 67.407.
67.27	§ 67.409.
67.29	§ 67.411.
67.31	§ 67.413.

The Amendments

In consideration of the foregoing, the Federal Aviation Administration amends parts 61 and 67 of Title 14 Code of Federal Regulations (14 CFR parts 61 and 67) effective September 16, 1996.

The authority citation for part 67 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44703, 44707, 44709–44711, 45102–45103, 45301–45303.

Part 67—Medical Standards and Certification
Subpart A—General

Source: Docket No. 1179 (27 FR 7980, 8/10/62) effective 11/1/62 unless otherwise indicated; [(Docket No. 27940, Amdt. 67–17, Eff. 9/16/96 (61 FR 11238, 3/19/96)]

§ 67.1 Applicability.

This part prescribes the medical standards and certification procedures for issuing medical certificates for airmen and for remaining eligible for a medical certificate.

§ 67.3 Issue.

Except as provided in § 67.5, a person who meets the medical standards prescribed in this part, based on medical examination and evaluation of the person's history and condition, is entitled to an appropriate medical certificate.

§ 67.5 Certification of foreign airmen.

A person who is neither a United States citizen nor a resident alien is issued a certificate under this part, outside the United States, only when the Administrator finds that the certificate is needed for operation of a U.S.-registered aircraft.

§ 67.7 Access to the National Driver Register.

At the time of application for a certificate issued under this part, each person who applies for a medical certificate shall execute an express consent form authorizing the Administrator to request the chief driver licensing official of any state designated by the Administrator to transmit information contained in the National Driver Register about the person to the Administrator. The Administrator shall make information received from the National Driver Register, if any, available on request to the person for review and written comment.

Subpart B—First-Class Airman Medical Certificate

§ 67.101 Eligibility.

To be eligible for a first-class airman medical certificate, and to remain eligible for a first-class airman medical certificate, a person must meet the requirements of this subpart.

§ 67.103 Eye.

Eye standards for a first-class airman medical certificate are:

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) Normal fields of vision.

(e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

§ 67.105 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a first-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42d Street, New York, NY 10036):

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that—

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

§ 67.107 Mental.

Mental standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, ''psychosis'' refers to a mental disorder in which:

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section—

(i) ''Substance'' includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) ''Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by—

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds—

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.109 Neurologic.

Neurologic standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy;

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.111 Cardiovascular.

Cardiovascular standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Myocardial infarction;

(2) Angina pectoris;

(3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(4) Cardiac valve replacement;

(5) Permanent cardiac pacemaker implantation; or

(6) Heart replacement;

(b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:

(1) At the first application after reaching the 35th birthday; and

(2) On an annual basis after reaching the 40th birthday.

(c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

§ 67.113 General medical condition.

The general medical standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.115 Discretionary issuance.

A person who does not meet the provisions of §§ 67.103 through 67.113 may apply for the discretionary issuance of a certificate under § 67.401.

Subpart C—Second-Class Airman Medical Certificate

§ 67.201 Eligibility.

To be eligible for a second-class airman medical certificate, and to remain eligible for a second-class airman medical certificate, a person must meet the requirements of this subpart.

§ 67.203 Eye.

Eye standards for a second-class airman medical certificate are:

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) Normal fields of vision.

(e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

§ 67.205 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a second-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that—

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

§ 67.207 Mental.

Mental standards for a second-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, ''psychosis'' refers to a mental disorder in which:

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section—

(i) ''Substance'' includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) ''Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by—

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds—

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.209 Neurologic.

Neurologic standards for a second-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy;

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause;

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.211 Cardiovascular.

Cardiovascular standards for a second-class medical certificate are no established medical history or clinical diagnosis of any of the following:

(a) Myocardial infarction;

(b) Angina pectoris;

(c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(d) Cardiac valve replacement;

(e) Permanent cardiac pacemaker implantation; or

(f) Heart replacement.

§ 67.213 General medical condition.

The general medical standards for a second-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.215 Discretionary issuance.

A person who does not meet the provisions of §§ 67.203 through 67.213 may apply for the discretionary issuance of a certificate under § 67.401.

Subpart D—Third-Class Airman Medical Certificate

§ 67.301 Eligibility.

To be eligible for a third-class airman medical certificate, or to remain eligible for a third-class airman medical certificate, a person must meet the requirements of this subpart.

§ 67.303 Eye.

Eye standards for a third-class airman medical certificate are:

(a) Distant visual acuity of 20/40 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/40 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

§ 67.305 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a third-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969:

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that—

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

§ 67.307 Mental.

Mental standards for a third-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, ''psychosis'' refers to a mental disorder in which—

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section—

(i) ''Substance'' includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) ''Substance dependence'' means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by—

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result conducted under an anti-drug rule or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds—

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.309 Neurologic.

Neurologic standards for a third-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy;

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.311 Cardiovascular.

Cardiovascular standards for a third-class airman medical certificate are no established medical history or clinical diagnosis of any of the following:

(a) Myocardial infarction;

(b) Angina pectoris;

(c) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(d) Cardiac valve replacement;

(e) Permanent cardiac pacemaker implantation; or

(f) Heart replacement.

§ 67.313 General medical condition.

The general medical standards for a third-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate,

qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.315 Discretionary issuance.

A person who does not meet the provisions of §§ 67.303 through 67.313 may apply for the discretionary issuance of a certificate under § 67.401.

Subpart E—Certification Procedures

§ 67.401 Special issuance of medical certificates.

(a) At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization), valid for a specified period, may be granted to a person who does not meet the provisions of subparts B, C, or D of this part if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who does not meet the provisions of subparts B, C, or D of this part if that person possesses a valid Authorization and is otherwise eligible. An airman medical certificate issued in accordance with this section shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. At the end of its specified validity period, for grant of a new Authorization, the person must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force.

(b) At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA) may be granted, instead of an Authorization, to a person whose disqualifying condition is static or nonprogressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and authorizes a designated aviation medical examiner to issue a medical certificate of a specified class if the examiner finds that the condition described on its face has not adversely changed.

(c) In granting an Authorization or SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including—

(1) The combined effect on the person of failure to meet more than one requirement of this part; and

(2) The prognosis derived from professional consideration of all available information regarding the person.

(d) In granting an Authorization or SODA under this section, the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:

(1) Limit the duration of an Authorization;

(2) Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;

(3) State on the Authorization or SODA, and any medical certificate based upon it, any operational limitation needed for safety; or

(4) Condition the continued effect of an Authorization or SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.

(e) In determining whether an Authorization or SODA should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

(f) An Authorization or SODA granted under the provisions of this section to a person who does not meet the applicable provisions of subparts B, C, or D of this part may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if—

(1) There is adverse change in the holder's medical condition;

(2) The holder fails to comply with a statement of functional limitations or operational limitations

issued as a condition of certification under this section;

(3) Public safety would be endangered by the holder's exercise of airman privileges;

(4) The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under this section; or

(5) The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization or SODA under § 67.403.

(g) A person who has been granted an Authorization or SODA under this section based on a special medical flight or practical test need not take the test again during later physical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

(h) The authority of the Federal Air Surgeon under this section is also exercised by the Manager, Aeromedical Certification Division, and each Regional Flight Surgeon.

(i) If an Authorization or SODA is withdrawn under paragraph (f) of this section the following procedures apply:

(1) The holder of the Authorization or SODA will be served a letter of withdrawal, stating the reason for the action;

(2) By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization or SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

(3) Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

(4) A medical certificate rendered invalid pursuant to a withdrawal, in accordance with paragraph (a) of this section, shall be surrendered to the Administrator upon request.

(j) No grant of a special issuance made prior to September 16, 1996, may be used to obtain a medical certificate after the earlier of the following dates:

(1) September 16, 1997; or

(2) The date on which the holder of such special issuance is required to provide additional information to the FAA as a condition for continued medical certification.

§ 67.403 Applications, certificates, logbooks, reports, and records: Falsification, reproduction, or alteration; incorrect statements.

(a) No person may make or cause to be made—

(1) A fraudulent or intentionally false statement on any application for a medical certificate or on a request for any Authorization for Special Issuance of a Medical Certificate (Authorization) or Statement of Demonstrated Ability (SODA) under this part;

(2) A fraudulent or intentionally false entry in any logbook, record, or report that is kept, made, or used, to show compliance with any requirement for any medical certificate or for any Authorization or SODA under this part;

(3) A reproduction, for fraudulent purposes, of any medical certificate under this part; or

(4) An alteration of any medical certificate under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for—

(1) Suspending or revoking all airman, ground instructor, and medical certificates and ratings held by that person;

(2) Withdrawing all Authorizations or SODA's held by that person; and

(3) Denying all applications for medical certification and requests for Authorizations or SODA's.

(c) The following may serve as a basis for suspending or revoking a medical certificate; withdrawing an Authorization or SODA; or denying an application for a medical certificate or request for an authorization or SODA:

(1) An incorrect statement, upon which the FAA relied, made in support of an application for a medical certificate or request for an Authorization or SODA.

(2) An incorrect entry, upon which the FAA relied, made in any logbook, record, or report that is kept, made, or used to show compliance with any requirement for a medical certificate or an Authorization or SODA.

§ 67.405 Medical examinations: Who may give.

(a) *First-class.* Any aviation medical examiner who is specifically designated for the purpose may give the examination for the first-class medical certificate. Any interested person may obtain a list of these aviation medical examiners, in any area,

from the FAA Regional Flight Surgeon of the region in which the area is located.

(b) *Second- and third-class.* Any aviation medical examiner may give the examination for the second- or third-class medical certificate. Any interested person may obtain a list of aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.

§ 67.407 Delegation of authority.

(a) The authority of the Administrator under 49 U.S.C. 44703 to issue or deny medical certificates is delegated to the Federal Air Surgeon to the extent necessary to—

(1) Examine applicants for and holders of medical certificates to determine whether they meet applicable medical standards; and

(2) Issue, renew, and deny medical certificates, and issue, renew, deny, and withdraw Authorizations for Special Issuance of a Medical Certificate and Statements of Demonstrated Ability to a person based upon meeting or failing to meet applicable medical standards.

(b) Subject to limitations in this chapter, the delegated functions of the Federal Air Surgeon to examine applicants for and holders of medical certificates for compliance with applicable medical standards and to issue, renew, and deny medical certificates are also delegated to aviation medical examiners and to authorized representatives of the Federal Air Surgeon within the FAA.

(c) The authority of the Administrator under 49 U.S.C. 44702, to reconsider the action of an aviation medical examiner is delegated to the Federal Air Surgeon; the Manager, Aeromedical Certification Division; and each Regional Flight Surgeon. Where the person does not meet the standards of §§ 67.107(b)(3) and (c), 67.109(b), 67.113(b) and (c), 67.207(b)(3) and (c), 67.209(b), 67.213(b) and (c), 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c), any action taken under this paragraph other than by the Federal Air Surgeon is subject to reconsideration by the Federal Air Surgeon. A certificate issued by an aviation medical examiner is considered to be affirmed as issued unless an FAA official named in this paragraph (authorized official) reverses that issuance within 60 days after the date of issuance. However, if within 60 days after the date of issuance an authorized official requests the certificate holder to submit additional medical information, an authorized official may reverse the issuance within 60 days after receipt of the requested information.

(d) The authority of the Administrator under 49 U.S.C. 44709 to re-examine any civil airman to the extent necessary to determine an airman's qualification to continue to hold an airman medical certificate, is delegated to the Federal Air Surgeon and his or her authorized representatives within the FAA.

§ 67.409 Denial of medical certificate.

(a) Any person who is denied a medical certificate by an aviation medical examiner may, within 30 days after the date of the denial, apply in writing and in duplicate to the Federal Air Surgeon, Attention: Manager, Aeromedical Certification Division (AAM–300), Federal Aviation Administration, P.O. Box 26080, Oklahoma City, Oklahoma 73126, for reconsideration of that denial. If the person does not ask for reconsideration during the 30-day period after the date of the denial, he or she is considered to have withdrawn the application for a medical certificate.

(b) The denial of a medical certificate—

(1) By an aviation medical examiner is not a denial by the Administrator under 49 U.S.C. 44703.

(2) By the Federal Air Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703.

(3) By the Manager, Aeromedical Certification Division, or a Regional Flight Surgeon is considered to be a denial by the Administrator under 49 U.S.C. 44703 except where the person does not meet the standards of §§ 67.107(b)(3) and (c), 67.109(b), or 67.113(b) and (c); 67.207(b)(3) and (c), 67.209(b), or 67.213(b) and (c); or 67.307(b)(3) and (c), 67.309(b), or 67.313(b) and (c).

(c) Any action taken under § 67.407(c) that wholly or partly reverses the issue of a medical certificate by an aviation medical examiner is the denial of a medical certificate under paragraph (b) of this section.

(d) If the issue of a medical certificate is wholly or partly reversed by the Federal Air Surgeon; the Manager, Aeromedical Certification Division; or a Regional Flight Surgeon, the person holding that certificate shall surrender it, upon request of the FAA.

§ 67.411 Medical certificates by flight surgeons of Armed Forces.

(a) The FAA has designated flight surgeons of the Armed Forces on specified military posts, stations, and facilities, as aviation medical examiners.

(b) An aviation medical examiner described in paragraph (a) of this section may give physical examinations for the FAA medical certificates to persons who are on active duty or who are, under Department of Defense medical programs, eligible for FAA medical certification as civil airmen. In addition, such an examiner may issue or deny an appropriate FAA medical certificate in accordance with the regulations of this chapter and the policies of the FAA.

(c) Any interested person may obtain a list of the military posts, stations, and facilities at which a flight surgeon has been designated as an aviation medical examiner from the Surgeon General of the Armed Force concerned or from the Manager, Aeromedical Education Division (AAM–400), Federal Aviation Administration, P.O. Box 26082, Oklahoma City, Oklahoma 73125.

§ 67.413 Medical records.

(a) Whenever the Administrator finds that additional medical information or history is necessary to determine whether an applicant for or the holder of a medical certificate meets the medical standards for it, the Administrator requests that person to furnish that information or to authorize any clinic, hospital, physician, or other person to release to the Administrator all available information or records concerning that history. If the applicant or holder fails to provide the requested medical information or history or to authorize the release so requested, the Administrator may suspend, modify, or revoke all medical certificates the airman holds or may, in the case of an applicant, deny the application for an airman medical certificate.

(b) If an airman medical certificate is suspended or modified under paragraph (a) of this section, that suspension or modification remains in effect until the requested information, history, or authorization is provided to the FAA and until the Federal Air Surgeon determines whether the person meets the medical standards under this part.

§ 67.415 Return of medical certificate after suspension or revocation.

The holder of any medical certificate issued under this part that is suspended or revoked shall, upon the Administrator's request, return it to the Administrator.

Please access the Universal Resource Locators (URL) to obtain a copy of the following Appendices. Typing in your browser, or clicking on these URL's will take you to the corresponding web site.

APPENDIX B – Agency Forms

http://forms.faa.gov/

APPENDIX C – List of the Regional Flight Surgeons, including names, addresses, telephone/facsimile numbers, and e:mail addresses.

http://www.cami.jccbi.gov/aam-300/rfs.html

APPENDIX D – Aviation Medical Examiner System, FAA Order 8520.2E

http://www2.faa.gov/avr/aam/order8520-2e.htm

APPENDIX E – List of FAA Flight Service District Offices

http://www1.faa.gov/avr/afs/fsdo/